RCMA
NEWSLETTER
OCTOBER
1987

Photo by Rick DiFiore (CA-LA-544)

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RCMA NEWSLETTER

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FOR YOUR INFORMATION:

1. Input to the RCMA Newsletter must be mailed to the proper editors, whose addresses are included in the individual column headlines. If no particular column seems appropiate, send input to RCMA, P.O. Box 1198, Manhattan Beach, CA 90266-8198

2. To forward a letter to a specific RCMA member whose address you do not know, put your message to that person in a stamped envelope with your return address on it; mail to RCMA General Manager, P.O. Box 542, Silverado, CA 92676.

3. PLEASE INCLUDE YOUR RCMA MEMBERSHIP NUMBER WITH ALL CORRESPONDENCE to newsletter editors or club headquarters.

4. If you require a reply when writing to RCMA headquarters or to one of the editors, you MUST enclose a self-addressed, stamped envelope.

5. Please write on only one side of the paper.

6. Please don't combine in one letter several items that should go to different addresses.

7. If you want to type what you submit to the newsletter, please don't exceed a seven-inch column width and please single space. Doing this may save an editor from having to retype the material. Please don't use script type.

8. Your RCMA membership number and expiration date appear on your newsletter mailing label.

9. You may join or renew your membership for ONLY one year at a time.

10. RCMA accepts paid advertising. For information on advertising rates and mechanical requirements, contact Carol Ruth, RCMA Advertising Manager, P.O. Box 542, Silverado, CA 92676.

RCMA Newsletter

Issue 140 October 1987

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CONTACTING RCMA?

For membership applications or renewals, address changes, inquiries about delivery or renewal problems, write to:

RCMA General Manager
P.O. Box 542
Silverado, CA 92676

Have a comment about RCMA club policy or newsletter content? Write to:

William Mauldin, RCMA General Editor
961 Azalea Street
Boca Raton, FL 33486

Want a letter published in *Your Thoughts* column? Write to:

Kurt Swaney, RCMA Assistant Editor
P.O. Box 1198
Manhattan Beach, CA 90266-8198

Correspondence sent to RCMA's Anaheim P.O. Box will still be answered, but there will be a 4-6 week delay.

Cover Photo: "A different view of the Huey Cobra gunship on display in Long Beach, CA.

Photo by Rick DiFiore (CA-LA-544)

The RCMA Newsletter is published by members of the RADIO COMMUNICATIONS MONITORING ASSOCIATION, Inc., P.O. Box 4563, Anaheim, CA 92803. Subscription rate/membership fee is $16.50 for U.S. residents. For persons in other countries, the following rates apply: Canada and Mexico—$18.50; Europe—$20; South Pacific and Asia—$21.50. These dues are payable in U.S. funds and are subject to change. Information contained herein is obtained primarily from members and does not necessarily present the position or reflect the opinion of RCMA as a whole. RCMA, Inc. does not necessarily recommend or endorse products or services advertised herein. The publication is copyrighted ©. Reproduction of any material in this newsletter is prohibited without prior written consent.

CALENDAR

Send notices of upcoming events for the Calendar section to:
John R. Clark, 2701 Fairview Road, Costa Mesa, CA 92626

Deadline: 1st of the month two months prior to cover date.

R.C.M.A. San Francisco Area Chapter

Apologies are in order to Jon Creghino, who—as he points out in his letter to the editor (p.6)—does not head up the RCMA San Francisco Chapter. In fact, there is no San Francisco chapter at present, although, as Jon also let us know, there is considerable interest in having one. Anyone interested, please contact the Calendar Editor.

R.C.M.A. Greater Los Angeles Area Chapter

We are still in the process or a reorganization. Check this column next month. Late minute information may appear on 446.375 MHz. Remember the TRW Swap Meet "walk about" is the last Saturday of each month. Most of the old members are there.

R.C.M.A. West Los Angeles Area Chapter

Contact : Rick DiFiore (CA-LA-544) (213) 397-6581 or
Hugh Stegman (CA-LA-472) (213) 398-5353
Talk in: 146.925 MHz {-600 PL-2A} Tues 1930 hrs net.

Meetings on the second Wednesday of each month at 7:30 PM. The location is Shakey's Pizza Parlor, 12924 Washington Blvd, Culver City. Take the 405 Freeway to Washington, and go west to the Shakey's at the corner of Beethoven St. Use frequency 146.925 for talkin.

Austin Area Radio Listeners Meeting

Contact David Litsinger TX-032 441-0650
P.O. Box 17142, Austin, TX 78760

Meetings 3rd Thursday 7:00 PM NOTE NEW TIME, DATE AND LOCATION
South Austin Multi-Purpose Center
2508 Durwood (off 500 Blk W. Olterf)
Lots of easy parking here

R.C.M.A. Chicago Chapter

Contact Edward Robert Sirovy IL-004 312 969 2856
311 S. Williams Street, Westmont, Il 60559

Saturday September 19 1987 1:00 PM
Saturday November 14 1987 1:00 PM

Visitors are welcome but please confirm the date in advance.

The Chicago Chapter requests members send a years supply of 9 SASE's plus $2.00 to the "contact person" listed above. The funds will cover the printing of a newsletter that will be sent of all chapter members· just before each meeting.

R.C.M.A. Wisconsin Chapter

Contact Scott W. Miller WI-039
122 Greenbriar Drive, Sun Prairie, WI 53590

R.C.M.A. for D.C., MD, VA & DE

Contact: Capitol Hill Monitors % Alan Henney (MD 069)
6912 Prince Georges Ave, Takoma Park, MD 20912

Local chapter newsletter is supplementary to the RCMA newsletter. Because members are so far apart, no meetings are presently scheduled. However, anyone interested in corresponding or meeting local area members may send their name, address, phone (optional) & monitoring interests to above address. A list of these names and interests will be compiled and sent to individuals on the list. Visitor, traveler, frequency & newsletter requests are also welcome.

R.C.M.A. Minneapolis - St. Paul Area Chapter

Contact: Chuck Steier MN-008 (612) 927-9253
4820 Hwy 7, Minneapolis, MN 55416

A SASE on file assures notification of chapter activities (tours, gatherings, etc). Non members are welcome to attend.

All Ohio Scanner Club

Contact David B. Marshall OH-146, Managing Editor
50 Villa Road, Springfield, OH 45503-1036

The All Ohio Scanner Club covers all of Ohio, plus Inidana, Kentucky, Michican, Pennsylvania, West Virginia, and Ontario, Canada, plus other areas as well. Members from these and other areas are welcome. The AOSC newsletter also features execellent fedteral goverment and below 30 MHz utilities columns.

Sample Newsletter $2.00. Membership information for a SASE

NEED RCMA BACK ISSUES?

1985, 1986 and 1987 issues to date are available until Dec. 31 of this year, at which time 1985 issues will no longer be stored. The following postage rates apply to all orders, and are in addition to the cost of the newsletters.

THE COST OF EACH ISSUE IS $1.00
When ordering, calculate $1 per issue. Then refer to the chart below to the correct amount of postage. (Rates based on lst class USPS)

# OF ISSUES	AMOUNT OF POSTAGE
1	$ .73
2	$ 1.41
3	$ 2.09
4 thru 8	$ 2.40
9 thru 12*	add $ .48 for each issue

*Orders shipped at maximum of one year (12 issues) per package.

NO COLUMN THIS MONTH...

Federal Government & Military
Editor: Denny Biagioli, 607 W. Pleasant Ave, Villa Park, IL 60181

Listener Profile
Editor: Joe Lewis, 750 Scotland St, Dunedin, FL 34698

Public Safety - South East
Editor: Jorge Rodrigues, 1129 Castile, Coral Gables, FL 33134

Technical Topics
Editor: Terry Stader, 8 Christopher Road, Westford, MA 01886

ASSOCIATION OF NORTH AMERICAN RADIO CLUBS NEWS HIGHLIGHTS

ANARC is a federation of the most responsible, well-established radio listening clubs in North America. RCMA attained Full Member status in ANARC in 1977. For a list of the ANARC Member and Associate Member clubs send a self-addressed, stamped business size envelope with your request to the address below.

Write to: ANARC Newsletter, P.O. Box 462, Northfield, MN 55057 for the following:

- **Copy of ANARC Club listing—send 25 cents and a business size SASE**
- **Sample copy of ANARC Newsletter—send 60 cents and a business size SASE**
- **Annual subscription to ANARC Newsletter—$7.50 for residents of the U.S., Canada, and Mexico; $10 Overseas (Airmail)**

SEPTEMBER 19 - ROCKY MOUNTIN RADIO LISTENERS. Saturday, 1:00 PM, 3031 West 76th Ave., Westminster, CO. For details send a SASE to R.M.R.L. 4131 South Andes Way, Aurora, CO 80013-3831 (a chapter of SPEEDX.)

OCTOBER 17 - SOUTHERN CALIFORNIA AREA DXERS (SCADS) Saturday, 10AM-3PM. Lutheran Church of the Holy Trinity, 1900 East Carson St., Long Beach,CA All DXers are welcom. For program details, Send a SASE to S.C.A.D.S., % Don R. Schmidt, Director, 3809 Rose Ave, Long Beach, CA 90807-4335

THE ASSOCIATION OF DX REPORTERS are celebrating their sixth birdhday. Dues are $17.00 a year in North America. For more details about the club write ADXR, 7008 Plymouth Road, Baltimore, MD 21208

THE PROMOTIONS AND TAPE COLLECTORS CLUB has been organized for traders and collectors of radio/TV station stickers, T-shirts, etc. as well as "airchecks" and recording of radio statins. Members share information through a newsletter issued 10 times a yhear. Sample copy $1.00, Dues are $8.00/year in U.S. $9.00/year Canada. For more information write Mark Strickert, P.O. Box 355, Berkeley, CA 94701

ANTIQUE RADIO CLASSIFIED is a monthly publication for buyers and sellers of old radios and related items. It has the largest circulation in the antique radio field. $10.00/six months or $18.00/yeär from A.R.C., P.O. Box 2, Carlisle, MA 01741

GILFER ASSOCIATES INC has a new toll-free telephone number for quick ordering for out-of-state coustomers. Between 9AM and 5PM Eastern time. call Gilfer Shortwave at 1-800-GILFER-1.

RADIO-CRAFT JUBILEE SOUVENIR NUMBER celebrates 50 years of radio by a complete reprint of the March 1938 issue, edited by Hugo Gernsback. Large size with glossy cover $14.95/copy plus $2.00 postage in North America. Order from Vestal Press, 320 North Jensen Road, P.O. Box 97, Vestal, NY 13850.

your thoughts

Kurt Swaney, RCMA Assistant Editor
P.O. Box 1198, Manhattan Beach, CA 90266-8198

Your Thoughts is the RCMA members' forum on current topics of interest to the scanner hobbyist. If you have an opinion you would like to express, RCMA encourages you to send it in.

Your letter must include your name, address, and RCMA membership number. Due to space limitations, RCMA reserves the right to condense submitted material.

Dear Your Thoughts: 8 Jun 87

[This letter is in response to Ken Pehl's BBS recommendation, 6 June]

I like your idea [of using an electronic BBS], but I doubt that GEnie is the best service. I would prefer to see your idea become a reality on American People/Link (PLINK) instead.

Why do I feel the way I do about this? Well, there are a number of reasons:

1. PLINK is accessible from far more cities than GEnie. PLINK is accessed via TYMNET and TELENET, whereas GEnie is accessed only through their own network. In Texas alone I counted 62 TYMNET/TELENET numbers against GEnie's 38. Furthermore, TYMNET and TELENET are worldwide. You can't say that for GEnie's network.

2. The rates for GEnie and PLINK are nearly the same at night. During the day, PLINK is about one-half that of GEnie.

3. PLINK specializes in nothing but special interest groups (SIGs) and on-line conferencing.

I use both services. For the money and what you want to accomplish, I feel that you would be better off opting for PLINK over GEnie.

Irregardless of which service you decide to use, you can count on my support.

Gary Darcy, CA-LA-059

Dear Your Thoughts: 19 Jun 87

Reaction to my GEnie proposal letter has already come from several directions. Gary Darcy, the Marketplace column editor, and John Hodal, the Computer column editor, have both proposed yet other network alternatives to the GEnie network. Both proposals appear to have merit and deserve further investigations before adopting a network for the RCMA and/or the Radio Hobbyist Special Interest Group BBS. One proposal was to use the People/Link network and the other proposal was to use the TeleNet network. The major advantage of both of these networks is that apparently these networks are available in more cities and towns than GEnie. In fact, TeleNet is available internationally! GEnie is not, except in select parts of Canada, as they use their own phone network. Further, the People/Link network appears to be cheaper yet with their service charges.

I am sure that whatever is decided, a national BBS will cŏme out of this. It is becoming clear that ALL the networks need to be reinvestigated since the market place competition apparently is working its magic. New policies/rates and networks are coming out all the time. There is no telling what is available now and what is the best over-all deal as opposed to what Ed [Lentz] had found up to the point he endorsed GEnie. I understand CompuServe has changed its rate more favorably.

I had briefly heard of People/Link before but frankly never gave it serious consideration because of its monthly fee. Apparently that has now been changed. Having a monthly fee wouldn't be of any interest to me as there might be some months when I wouldn't be active and the charge would still be there on top of any actual usage. Frankly, I like to pay just for the amount of use, nothing else. As far as the increased number of phone drops available, I'm afraid that wouldn't be of any benefit to me unless my town (Fredericksburg, TX) would happen to be on the list. I would probably still need to make an out of state LD call. However, I can plainly see that more potential users can be found in this fashion.

Since my letter regarding the GEnie network and the RCMA BBS proposal will apparently be published before the matter of which network is best is settled, it might look like we weren't very well prepared and had not checked everything out before making our proposal. For the uninitiated, the FAST changes on these networks are not that apparent, but getting that point across is something else.

One other point: no matter which network is finally utilized, the Radio Hobbyists special interest group (SIG) must be made flexible enough to be able to quickly change networks in the event a given network's policy changes, making it unsuitable for the Radio Hobbyists SIG. The Radio Hobbyists SIG could rapidly change with a minimum of delay.

Aonther thing I need to make clear is that I wrote my GEnie proposal letter in support of Ed Lentz, who originally thought up the idea. I was not the originator of this official network idea. I merely wrote a letter of support. It seems that my letter to all parties involved arrived before Ed's did in some cases. I will let Ed take the lead in

investigating and deciding which [BBS] has the best overall deal. Whatever Ed and the participating radio/computer members (RCMA and non-RCMA) decide is okay by me.

Ken Pehl, TX-003

Dear Your Thoughts: 22 Jun 87

Allow me to complement you on one of the best written and informative articles I have ever encountered on the subject of electronic privacy laws.

The technical intrusion of communications privacy is indeed a very touchy issue. For example, nobody today would argue that they have the right to listen in on another's private telephone conversations surreptitiously. On a wire it is illegal, but on the air waves, at present it is not and may soon well be. Also, as here it cannot be argued that there is even a need to know, as a public right. I have the right to go into a legal burlesque theater and see what goes on there, but I do not have the right to be a peeping tom, intruding on someone's privacy. The line has to be drawn somewhere.

Sol Hoffman, CA-LA-697

Dear Your Thoughts: 22 Jul 87

Several months ago I sent [the CALENDAR column] information about a tour of the FCC monitoring facility at Livermore. At that time my name was printed under the header RCMA San Francisco Area Chapter.

I received quite a bit of mail asking about the San Francisco area meetings. As far as I know, there isn't any San Francisco Area Chapter of RCMA, so it was difficult for me to explain where the meetings take place.

I don't want to discourage members from writing to me, but I think it is misleading for my name to appear under [the CALENDAR] header as contact for the S.F. area chapter.

Jon Cereghino, CA-SC-049

Dear Your Thoughts: 27 Jul 87

During the early evening of Thursday, July 23, 1987, the Twin Cities (Minneapolis and St. Paul) and the surrounding southern suburbs were hit with a very severe storm. We had winds in excess of 80 MPH, hail the size of golf balls, several tornadoes, and very heavy rains measuring from 8 to 12 inches in about a six hour time frame. The storm was so severe that the Minneapolis/St. Paul International Airport had to close down. Most telephone service was out and many of the roads were washed out. On Friday most of the businesses in the storm area had to remain closed.

While watching TV and listening to my police scanner, I programmed in some of the ham repeaters. Much to my surprise I got better information from listening to them than from the public service agencies.

While listening again on Friday morning, July 24, 1987, the ham operators formed a radio net and were giving out information such as road closings, etc.

About 10:00 am I heard a ham operator on the net from northern Minnesota asking for someone to go over to his parents home to check on their safety. He had been unable to contact them by telephone. This was done and they relayed back a message to northern Minnesota that everything was okay with his parents.

I feel that many lives were saved due to the help of these ham radio

operators in keeping the lines of communication open in the time of an emergency.

HAM RADIO OPERATORS, I salute you for a job well done. Roger West, MN-052

TO : All RCMA Members
FROM : John R. Clark CAOR078 KA6JCX JRC
SUBJECT : Thinking about the future

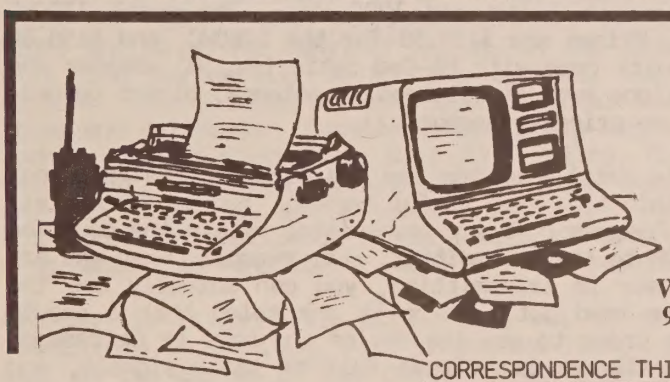
With all the new anti-scanner laws being generated, I believe any scanner owner may need the protection granted to amateur radio operators. There is no question that The American Radio Relay League (ARRL) has more lobbyists than any scanner group; this is why most local and state scanner laws have exception clauses for the federal licensed amateur radio operators. Money invested in getting a ham ticket could be considered as a form of insurance.

Today a scanner owner has an opportunity to acquire the FCC Novice in a painless fashion by taking advantage of changes in the procedures for testing. The exams are no longer given by the FCC (a rather stressfull experience), they are now given by local amateur groups. Classes are offered by community colleges and other organizations at very low cost.

The Gordon West Radio School (see August 1987 newsletter page 50) is quick way to prepare for the Novice Examination. It costs $21.95 and is designed to get you ready for the test in 21 days. The course covers both the code and theory portions of the exam. In addition to the instruction you will obtain you will also receive a $20.00 Icom and a $25.00 Kenwood gift certificates plus a free copy of CQ Magazine and lots of other material. For RCMA members Gordon indicates he will autograph your text.

While this deal sounds too good to be true, it is valid. Gordon has developed a method of teaching that is almost fool proof. It works, I have taken four of his classes and have FCC Advanced Operator Privileges. Many of the LA Area RCMA members have done the same. The majority of us did so when we had to go to the FCC center to take the exams. Today the new rules makes the acquisition of the tickets easier.

Remember you do not have to be an active Ham to keep your FCC license, the fact that you have it may help you. Amateur radio is a great hobby; but I have never talked on HF and I used my gift certificate to obtain a scanner antenna. I do value the FCC license. I would recommend any scanner owner to read the scanner laws, note the amateur exceptions, and THINK!



From The CAPTAIN'S DESK

William Mauldin, RCMA General Editor
961 Azalea Street, Boca Raton, FL 33486

CORRESPONDENCE THIS MONTH

This month has brought several letters on some old subjects that perhaps should be mentioned briefly again.

CONTACTING OTHER MEMBERS has always been somewhat of a problem in the club. There are those of you who would like to write letters and contact other members in your area. And, on the other hand we have many members who do not want their names and addresses given out under any condition. Some members feel "big brother" will one day collect scanners and other listening devices, and they closely guard their privacy on the club rolls.

In answer to this problem, RCMA has developed a column called CONTACT AND INFORMATION WANTED. The purpose of this column is to allow members to advertise their desire to contact and/or correspond with other club members. Your advertisement for this purpose will be printed free, and most times, you will be pleased with the member res-

ponse. If you are one of these members who does desire to contact others in your area, it is my suggestion that you use CONTACT for this purpose.

RCMA also offers a limited forwarding service if you wish to write to a specific member. You can write to a member, using the members name and/or membership number by following these instructions:

Write your letter and put it in a stamped envelope. Place your name, club ID number and full return address in the upper left hand corner. Place the members name (what you know of it) and the members ID number on the envelope. Place this sealed envelope in a regular business envelope and mail to RCMA, P.O. Box 542, Silverado, CA 92676. RCMA will add the members full name and address and mail directly to the other club member. It is important to stamp your letter with the required postage, as we can not add postage. Letters are forwarded promptly on a time available basis.

LARGER PRINT IN THE NEWS LETTER is the next subject that was mentioned in the letters received this month. This is a problem for some of you, as addressed by the volume of mail I receive on this subject.

As most of you know, material submitted by editors is received by Carol Ruth in "camera ready" condition. That is to say, the material has been collected, edited, corrected and typed or printed so that when received in California it can be photographed, reduced and printed with a minimum of expense.

Our NEWSLETTER is clipped, positioned and printed by Carol Ruth - who I might add has done an excellent job with the monthly project over the years. We only have so many pages to work with each month, with 88 being the desired objective. Our monthly NEWSLETTER is reduced in size because it is the best size for the maximum amount of material to be printed. Presently, we can not increase the size or the type without directly increasing the annual membership dues to you. We have investigated every possibility, and we will continue to do so as printing improvements evolve, however, for the time being, there is no better method or size for the money. If you, as a member, happen to have suggestions and ideas for improving our monthly NEWSLETTER, we welcome your comments and suggestions, as always!

My thanks to each of you who have written this month on these two subjects. When we get several letters on the same subject, we do act and respond, as best we can.

FREQUENCY COUNTER, POCKET SIZE

OPTO Electronics (a Made in the USA) company has just released a new frequency counter that might be of interest. There are two models presently available. The 1200HC model measures frequencies between 1 MHz and 1200 MHz. The model 1300HC measures between 1 MHz and 1300 MHz. Prices are $137.50 for the 1200HC, and $150.00 for the 1300HC. Both pocket size units come with Ni-Cad batteries, AC adapter and battery charger. There are other options such as telescoping antenna, direct connection probe and carrying case, which are priced reasonably.

It is impossible to give you complete details on the use and purpose of a frequency counter in a short column, however, this is a very useful device. You can accurately measure (read out) the transmitting frequency of any transmitter within the counting range of the counter when CLOSE ENOUGH to the transmitter. For example, when you are close to a walkie talkie and the user is transmitting, you can actually see the transmitting frequency on the counter read out. There is one thing that I should mention here, however! Remember, in order to use the device you have to be reasonably CLOSE to the transmitter. The airways are always full of radio signals, and being reasonably close to the transmitter is crucial when making the counter actually read the frequency of the transmitter.

These counters have been used for years by technicians, however, OPTO mentions in their advertisement that this unit is especially useful by law enforcement, hams, schools, engineers, hobbyists, short wave listeners and monitoring buffs alike. If you are interested in really digging around for transmitter output frequencies while out and about, perhaps a pocket frequency counter is just the hobby tool for you! There are many devices which make our hobby more enjoyable. This is just one of them. Contact your local radio dealer or OptoElectronics, Inc., 5821 NE 14th Avenue, Ft. Lauderdale, FL 33334 for more information. Please mention that you heard about the counters in our club magazine, and suggest that they consider advertising with us. Advertising pays our bills.

NATIONAL PAGING SERVICE BEGINS OPERATION

The first nationwide paging service has started operations. SkyPage Service from Washington, DC has started nationwide paging. The service has been expanded to 51 cities after the initial test to 16 cities proved successful. Callers can dial a toll free number and, through a series of voice prompts, enter a subscriber personal identification number. The signal is sent over leased lines to a satellite sending station where it is relayed to Westar IV in a 900 MHz system. The message is then sent to each city where SkyPage has local transmitting services, where the signal is received by the subscriber.

SkyPage is one of three companies offering the nationwide paging service, and in their marketing efforts such extras as call in checks offer updates on all messages for the past 99 hours.

800 MHZ TRI BAND DISGUISE ANTENNAS MARKETED

A new series of 800 MHz disguise antennas is now being offered to customers who want to disguise their cellular phone or 800 MHz radio installations. The antennas are cosmetic and offer matching devices for double use as standard broadcast antennas for most modern vehicles. Most of the antennas are 31 inch broadcast reception look-alikes, and blend right in with the look of most factory antennas.

FCC INSTITUTES RULEMAKING FOR TRUNKING

The FCC announced that it has instituted a rulemaking procedure to explore the possibility of permitting additional trunking in the private land-mobile radio services. You remember that we reported several months ago that radio manufacturers were offering study plans on trunking for business radio. Since, under present rules, trunking is permitted only on the new 800 MHz and 900 MHz services, many users of other bands are expressing interest in the trunking other services and frequencies. The trunking of 800 MHz and 900 MHz has been very successful for most users. Technology was not available until just recently to allow trunking on other bands, however, you can expect to see possible rule changes to allow for trunking in the 470 MHz to 512 MHz band. Other bands to follow will be the 30 MHz to 50 MHz, 150 MHz to 170 MHz, and 450 MHz to 470 MHz bands. Watch FCC TOPICS for updates as they develop!

SCANNING PUBLICATIONS REVIEWED THIS MONTH

The Scanner Master Corporation has released two new publications for review this month. The SCANNER MASTER GUIDE for New Hampshire and Vermont and the SCANNER MASTER GUIDE for Maine. Both publications offer detailed listings, codes, maps, descriptions and so on for many, if not all of the radio systems used in these areas. You will find new details on 800 MHz systems, trunking, and emergency communications systems. The directories both offer special sections on the media, military, utilities and railroads. Excellent monitoring suggestions and tips are printed in both books. Details cover these subjects: police, fire, ambulance, municipals, emergency management, hospitals, environmental, campus police, weather, aircraft, marine, rail and bus, utilities, mobile phones, schools, cable TV, towing, sports, and many more. Additional information on SCANNER MASTER GUIDES can be obtained by writing to Scanning Master, 13 Pond Street, Natick, Massachusetts 01760.

Although it is generally RCMA Policy not to review CB publications, Bill Cheek of Commtronics Engineering, Post Office Box 1019, Lemon Grove, CA 92045, an RCMA member, sent us two copies of his ELEVEN METER TIMES & JOURNAL for review. The newspaper format publication is filled with news and personal columns on the subjects relating to citizen band radio and how to enjoy the hobby of CB radio. There are hobby related articles, news stories, rule and skip updates, projects for the hobbyist and so on. The ten page publication will certainly fill your mail box with CB news if you are into citizen band radioing at all. More information can be obtained from Bill Cheek at the address noted above.

Norm Schrein, formerly with Fox Marketing, has a new directory out, and the publication is being marketed by Universal Shortwave Radio, 1280 Aida Drive, Reynoldsburg, Ohio 43068. Norm, as you may remember, is the editor for many of the Fox Marketing Publications. This new directory is called SCANNER RADIO LISTINGS for COLUMBUS & SOUTHEASTERN OHIO. The 190 page book certainly covers the area mentioned in great detail. The format is the same as the Fox series of publications, with cross references, codes, frequencies and so on. If you are interested in the Ohio area, this is a book you would really enjoy! Details are available from Universal Radio at

614-866-4267 or by writing the above address, or by contacting Thunderbolt Traders, 6900 North Dixie Drive, Dayton, Ohio 45414. Both companies are distributors of the publication.

THE OFFICIAL MAINE SCANNER GUIDE has been published by Robert Coburn and Steve Donnell. The book is a massive 305 pages devoted to just about every possible two way communication in the State of Maine. In fact, I looked through the directory trying to see what they omitted when writing the book, and I could not find anything! When you have a 305 page directory devoted to one state, you know everything has to be in there. Of course, you will find frequencies and codes, not to mention many comments, listening suggestions, cross references, call signs and so on. In fact, if you have a two way radio license and live in Maine and you are not in this directory, your license has probably expired! These guys didn't leave out much, if anything, when they wrote this directory. The book has over 7,500 listings, and comes with a card for updating services. The price is $14.95, plus tax if you live in Maine, and is available from Official Maine Scanner Guide, Post Office Box 712, Londonderry, New Hampshire 03053. The phone is 603-432-2615.

Editor's Note: RCMA welcomes the opportunity to review publications that deal directly with our hobby of communications monitoring. Publishers should send publications to either the General Editor or selected column editors for a printed review in the RCMA NEWSLETTER. We encourage publishers to mention RCMA in the books, and ask that you consider advertising with us. Our low rates are available by contacting the RCMA Business Manager in Silverado, CA.

FOX MARKETING NO LONGER PUBLISHING DIRECTORIES

Several members have written this month and said that Fox Marketing is no longer offering scanner directories for sale through their 800 number. I contacted Fox and they advised that this was correct. Fox is NOT going to print any more scanner directories, and that they were closing out the few books which were remaining. Fox still has the 800-543-7892 toll free number regarding their product line, and there are a few books left in stock, but Fox is leaving the book publishing business and will print no more directories as of August. My thanks to the members who brought this to our attention!

CLOSING COMMENTS - ANNOUNCEMENTS - NEWS BRIEFS

It will soon be 1987 RCMA GENERAL SURVEY time once again! This is your BIG chance to vote on what you like, don't like, want to see, don't want to see in RCMA during 1988. Since our first RCMA General Survey was printed, RCMA has grown and improved in many areas as a direct result of your survey response. We need and want your input for 1988. John Clark is probably going to write the questions this year, and the centerfold pull out Survey form will be printed soon! I encourage you to respond and take the needed few minutes to give us your input!

If you have written me since August and have not received a reply, do let me hear from you again! My ZIP code changed in July and some mail may have been misplaced or perhaps never reached me at all. My new ZIP is 33486! Anytime to write to me or send me anything, you will get an acknowledgement card. Your comments are always welcome, needed and appreciated.

Our thanks to the ALL OHIO, NE SCANNING and the Chicago RCMA Chapter for the copies of your publications and news updates! RCMA Policy encourages the formation of clubs and other organizations devoted to our hobby of communications!

AIRCRAFT

Send private, commercial, firefighting and law enforcement aircraft frequencies of interest in the 108-136 MHz range and frequencies in other bands above 30 MHz associated with airports and aircraft plus questions, articles and tips related to aircraft monitoring to:

Darrel Charest, 7887 Brandy Circle, Colorado Springs, CO 80920

By the time this appears in print we will have completed the move to Colorado Springs and readjusted to our new surroundings. Yet as this is being written we are up to our armpits in packing boxes with just barely enough room to maneuver from one area to another. And while this is my 20th move in 42 years they never seem to get easier. If anything good is associated

with a move, the only benefit that has been apparent to me is that I run across many items that I haven't seen since the previous transfer such as pictures, QSL cards, costume jewlry and similar items. And sometimes its difficult to remember there was a time when I had a scalp that an Indian would admire instead one identical to "Kojack's." But there it is big as life right in the picture. Those were the days.

During the past month the mail has been a little light and at this time I consider this a blessing because of the move I've mentioned earlier. Yet an interesting coincidence happened a few days ago when I opened the mail. There were two letters both from the Chicago area from two new, proud owners of PRO-2004 scanners who were looking for aircraft channels in their area. One was from Jack Waterman a former editor of the Public Safety/Great Lakes column, and the other from Kurt M. Stoudt IL-342. Although I have already forwarded my charts, maps, books and other background data to Colo Sps, I still had VHF frequencies for Illinois that had been forwarded several months ago by Dennis Biagioli our Federal Government/Military Editor.

David. R. Alpert NY-364 wrote for ARINC frequencies for the New York area, but his letter arrived too late. I asked him to write again to my new address for the information.

Gary, CAOR-287, sent us an interesting list of frequencies for El Torro MCAS near Santa Ana and these appear at the end of the column. Gary mentions that he was able to monitor the Blue Angels on 142.0mhz during their demonstration and I'm sure this enhanced his enjoyment of the performance. As I mentioned before I don't feel that its appropriate to print these channels when they operate in the 118-136mhz band because of the multitude of aircraft transceivers that are capable of operating in this part of the spectrum that may lead to interference. Gary went on to say that El Torro Tower would not reveal the working frequency to other pilots who wished to monitor the performance. I would also give odds the Tower did not have that information at hand. Gary's frequency list appears later.

Alan Henney, our News Media Editor passed along some frequencies that had been provided by Gary Saffer, and we will include them in this month's column.

Before we get on to our frequencies for the month, I would like to add that I have been working on an aircraft frequency directory for the past six months and hope to have it in print during November 1987. Although I knew it would require loads of work and research, its been far more complicated than I ever could have guessed. For example I wrote all the FAA Regional Headquarters requesting sector charts and radio frequency information for every ARTC Center. Some responded within a few weeks, others took as long as two months and I have yet to receive information for San Juan and Panama Centers. One thing that soon becomes apparent, however, in developing the list - many channels displayed on charts, maps, and reference books are obsolete. Sometimes these changes are picked up on the charts during the normal 56 day publishing cycle but many just seem to slip through time after time. Although changes make it impossible to have a completely accurate directory, I plan to keep the data base as up to date as possible. Look for our paid advertisement.

These frequencies were supplied by Robert McConnell, Jr MA-064 and are from a comprehensive listing for the Greater Boston area. We have extracted the aircraft channels.

123.45*	Air to Air	120.65	Bradley Tower
132.65	Boston Center	122.00	Enroute Weather
133.85	Boston Center	122.20	FSS Common
123.05	Helicopter Opns	122.80	Unicom
119.60	Tweed - New Haven	125.80	Bradley Apch Ctl

*Although 123.45 is not an assigned frequency, it is often used for air to air and air to ground communications. Sometimes it provides some rare insight to how pilots feel about their company and its operation.

Here are the listings provided by Gary, CAOR-287

120.45	El Toro Ground	274.9	Tustin LTA Clrnc
383.8	El Toro Ground	380.8	Tustin LTA Ground
263.6	El Toro App Ctl	344.2	Tustin LTA Tower

120.8	John Wayne Ground	108.3	John Wayne ILS Localizer
1245.0	"NTK" Beacon	109.4	John Wayne ILS Localizer

Gary also reported that this year the Blue Angels used 251.6 and 275.35 for communications during their aerial demonstration.

Nearly overlooked the letter from Carl J. Gerosa, III who wrote last month to describe the airshow at Westchester County Airport, White Plains New York. In addition to WWII aircraft there was a large display of more recent private and commercial aircraft. The Special DPS unit used 158.97 for their operations.

119.7	Westchester Tower	Coordinated Airshow Activities
121.8	Ground Control	Controlled ground Maneuvering
122.95	Unicom	Information and Transportation
127.95	Clearance Delivery	

SALT LAKE CITY ARTC CENTER

Ashton, Id
134.50/323.0
132.40/338.3

Baker, Or
126.35/360.6

Battle Mt, Nv
126.10/269.0
132.25/352.0

Big Piney, Wy
134.50/323.0

Billings, Mt
135.25/343.7

Blackfoot, Id
134.50/323.0

Bliss, Id
128.55/397.9
118.05/272.7
317.7

Boise, Id
118.05/272.7
317.7
132.50/290.5

Bozeman, Mt
132.40/338.3

Burley, Id
118.05/317.7

Butte, Mt
133.40/285.4
132.40/338.3

Cascade, Id
132.50/290.5

Cedar City, Ut
133.60/271.2

Delle, Ut
128.55/397.9
134.80/257.7

Delta, Ut
118.65/354.0
134.80/257.7
132.55/322.4

Elko, Nv
132.25/352.0
126.10/269.0

Farson, Wy
132.02/363.1

Francis Peak, Ut
128.30/269.2
134.80/257.7

Glasgow, Mt
128.80/269.4

Great Falls, Mt
132.42/319.0
133.40/285.4

Green River, Wy
119.25/291.6

Hanksville, Ut
133.60/271.2

Jackson, Wy
133.25/263.1

Judith Mt, Mt
133.40/285.4
128.80/269.4

Lakeside, Mt
133.40/285.4

Lovell, Wy
133.25/263.1

Malad City, Id
128.30/269.2

Miles City, Mt
128.80/269.4

Missoula, Mt
133.40/285.4

Myton, Ut
128.30/269.2

Rome, Or
126.35/360.6

Salmon, Id
132.40/338.3

Sheridan, Wy
135.25/343.7

Squaw Butte, Id
126.35/360.6
132.50/290.5

Sunnyside, Ut
118.65/354.0
134.80/257.7

Thermopolis, Wy
119.25/291.6
133.25/263.1

Tonopah, Nv
133.45/322.5

Watford City, ND
128.80/269.4

Wilson Creek, Nv
118.65/354.0
133.45/322.5
134.52/278.1

Winnemucca, Nv
126.10/269.0

SEATTLE ARTC CENTER

Auburn, Wn
126.60/343.6
120.30/273.6

Cottonwood, Id
124.10/269.2
134.75/251.1

East Kent, Wn
120.30/273.6

Ferndale, Ca
124.85/306.3
135.15/360.7

Fort Lawton, Wn
128.50/306.9
134.95/270.3

Horton, Or
125.80/291.7
120.90/307.1
134.65/279.6

King Mt, Or
121.40/239.0
135.15/360.7
124.85/306.3

Lakeview, Or
127.60/351.7
134.90/327.1

Larch Mtn, Wn
126.60/343.6
128.30/269.0

Marlin, Wm
126,10/291.6

Mohler, Wn
125.30/307.8

Mt Stukel, Or
124.85/306.3
127.60/351.7

Neah Bay, Wn
125.10/319.2

Pendleton, Or
125.00/269.1
132.60/343.9
134.45/281.4

Redmond, Or
128.15/288.1
135.45/281.4

Scappoose, Wn
119.65/261.5
124.20/317.6

OAKLAND ARTC CENTER

Seattle, Wn
120.30/273.6
125.10/319.2
126.60/343.6
128.50/306.9

Spokane, Wn
124.10/269.2
126.10/291.6
134.75/251.1
125.30/307.8

The Dalles, Or
119.65/261.5

Whidbey Island, Wn
125.10/319.2
134.95/270.3

Yakima, Wn
120.30/273.6
132.60/343.9
134.75/251.1

Angles Camp, Ca
134.37/281.5
296.7
120.20/290.4
126.85/319.9
124.20/284.6
127.95/316.1

Fallon, Nv
128.80/285.5
134.45/269.3
296.7

Ferndale, Ca
134.15/387.1

Fresno, Ca
123.80/353.8
126.90/343.8
132.80/319.1
133.70/285.4
134.37/28.15
296.7

Half Moon Bay, Ca
125.45/307.3
127.45/357.6
132.65/274.6
134.15/387.1

Hollister, Ca
127.45/357.6

Mina, Nv
127.30/319.8
132.05/291.7

Mt Tamalpais, Ca
127.80/353.5
296.7

Priest, Ca
126.90/343.8
128.70/307.0
132.80/319.1
133.70/285.4
134.55/290.5

Red Bluff, Ca
132.20/281.4
132.95/287.9
133.37/306.2
134.97/379.2

Reno, Nv
134.45/269.3
128.80/285.5

Sacremento, Ca
127.95/316.1
132.95/287.9

San Louis Obispo, Ca
126.90/343.8
128.70/307.0

Tonopah, Nv
127.30/319.1
132.05/291.7

Ukiah, Ca
127.80/353.5
132.20/281.4

AMATEUR RADIO COMMUNICATIONS

This column is for reporting on amateur radio activities that may be of interest to scanner listeners. Send reports and questions concerning repeater nets, civil emergency systems, packet ratio, amateur TV, etc., to:

Gordon West, 2414 College Drive, Costa Mesa, CA 92626

It's now easier than ever before to obtain a Novice class amateur radio license. The new rules now allow beginner Novice class operators to use voice for long-range single sideband contacts on the 10-meter band, frequency modulated voice and repeater operation on the 220 MHz band, and frequency modulated voice and repeater operation on the 1270 MHz band. These new privileges, combined with a simple push-over examination that you can take in your own home now makes the amateur radio service more attractive than ever to scanner radio and shortwave radio listeners. If you've always secretly wanted to become a ham, but didn't like the code or theory, read on! It's easy to get the Novice license.

The big change took place last March 21st. It was long overdue to make the ham service more inviting to newcomers. The amateur radio service was shrinking dramatically because no new blood was being attracted to their ranks. The oldtimers were dying off, and kids with computers were simply not interested in playing Morse Code or winding wire around oatmeal boxes to build their own radio set. Everybody knew something had to be done, so the new enhanced Novice privileges were developed. These include voice for worldwide, voice for handheld repeater operation, the continuation of worldwide CW bands, and most important, frequency allocations for digital computer, radioteleprinter, and packet radio communications.

"The number of applications seeking to enter ham radio has skyrocketed to 10,314 for the 60-day period ending May 31, 1987," comments Fred Maia, W5YI. "By comparison, this figure was 3,418 for the same period in 1985, 4,983 in 1986. This is a 3 times increase!" adds Maia.

Still not convinced you might want to try out for the amateur radio service? Let me tell you how much easier the new examination process is.

To pass the Novice test, you need to score 74 percent on a 30-question

multiple choice exam. All test questions are published, so there are no secret or extra hard exams floating around. You study the questions and the multiple choice answers that will be the exact ones used on your test. Thirty questions are selected out of a pool of 300. Many of the questions are redundant, so it should take you less than a week or so to digest the material.

A simple code test is still required, but the code is sent at a "Boy Scout" speed of 5 wpm. This is so slow that a pair of code tapes is all you need to prepare for the exam. It should take you no more than three weeks to master the code with as little as 45 minutes practice per day. You'll probably find the kids around your house learning it faster than you because they don't have a preconceived hang-up on the code. The hardest part of learning the code is just making up your mind you're going to start learning the code. Once the process starts, it's down hill.

No longer does the FCC give the test. It's now given by two General class (or above) ham radio buddies. They can give you the test in your own home, too. They will pick the questions out of the book to give you. It can even be a verbal test, too.

The code test requires your two buddies to certify that you can receive Morse Code at a rate of 5 wpm. They might send you some code for a few minutes and ask you what was in the transmission. They might send the code at 5 wpm and ask you to say the letters out loud. If you freeze up with the sound of dits and dahs, they might ask you to write down the Morse Code and then identify the characters they are sending at 5 wpm. It's up to your two ham buddies to judge whether or not you are qualified for the entry-level Novice class license. You'll probably find your two ham friends more than willing to assist you through the examination process.

The chart that accompanies this column lists the amateur radio Novice privileges. The bottom three bands--80 meters, 40 meters, and 15 meters--are for CW Morse Code only. These bands are excellent for long-range CW contacts. For you shortwave listeners, they are nestled beside each of the worldwide long-range shortwave broadcast bands.

The 10-meter band is divided in half--28.1 MHz to 28.3 MHz reserved exclusively for CW and COMPUTER PRIVILEGES. This means you could send radioteleprinter, ASCII, AMTOR, and packet digital transmissions. If you are into computers, and if you enjoy long-range transmissions, the 10-meter band should bounce your signal several thousand miles during the daylight hours.

On the 10-meter band from 28.3 MHz to 28.5 MHz is the hotbed of daytime, long-range, single sideband, Novice-class activity. You can run well over 100 watts output legally with regular ham radio sets. There is no longer a low power Novice requirement. (However, you are prohibited from hooking up your worldwide ham set to a linear amplifier until you obtain the next class higher license.)

Amateurs use upper sideband with fully suppressed carriers on the 10-meter band. Double sideband AM transmissions are not allowed, nor are they authorized. Use professional ham gear on the 10-meter band--not converted CB radios. However, you can use your exixting Citizens Band antenna with very good results at 28 MHz. Although it's slightly non-resonant, a good CB antenna will give you excellent daytime worldwide results in the direction of the sun (Sporadic E and F2 layer propagation).

On the 220 MHz band, your privileges extend from 222.1 to 222.91 MHz covering over 54 repeater channels for extended line-of-sight range. You can run up to 25 watts of power, and you can also run packet communications on these frequencies, too. Most Novices like the small handhelds for 220 MHz. Mobile and base sets also work nicely on 220 MHz through repeaters as well as simplex. If you are into computers, tie it into a base 220 MHz transceiver and talk several states away through packet links.

Your 1.2 gigahertz privileges extend from 1270 MHz to 1295 MHz with over 239 repeater channels available and additional channels for simplex use. You can run 5 watts of voice or 5 watts of digital computerized communications through these repeaters or direct. You can even experiment with amateur television, too. All three major equipment suppliers--Kenwood, Yaesu, and ICOM--have state-of-the-art equipment for 1.2 gigahertz. This band is near the cellular telephone frequencies, and has proved to be an excellent band for big-city communications.

The oldtimers have taken well to newcomers coming on their frequencies. At first they were hesitant to this new plan because they thought the newcomers would not operate as professional as they were. They were soon to find out that the newcomers brought to these frequencies a wealth of knowledge about propagation and computer technology. This is exactly the shot in the arm the amateur radio service needed--new blood.

What could be easier--the entry-level ham test is given by two ham radio buddies, and all of the test questions and answers are found in the study book. The code test is an easy 5 wpm, and the sample exam on the code tapes is just like the real exam your buddies might give. There is no license fee for filing for your FCC call letters. The FCC has streamlined their operation, and it now takes only about 6 weeks to obtain those call letters. If you like your call letters, you can hold onto the exact letters all the way through your amateur Extra class license.

In fact, while you are waiting for your call letters, you might begin to study for your Technician class license for 2-meter and 450 MHz privileges and 1500 watts power output. This test involves only 25 multiple choice questions, and no further code exam. The test is also given by three volunteer examiners.

In 21 days, you could pass the Novice exam and obtain your FCC amateur radio license. What are you waiting for? It couldn't be easier than now.

Novice Class Operating Privileges

Band	Frequency	Emissions	Applies to Novice and Technician Class
80 Meters	3700-3750 kHz	A1A	Limited to international Morse code. (200 watt PEP output limitation)
40 Meters	7100-7150 kHz	A1A	Same as above, except U.S. licensed operators in other than our hemisphere (ITU Region 2) are authorized 7050-7075 kHz due to short wave broadcast interference. (200 watt PEP output)
15 Meters	21100-21200 kHz	A1A	Same as the 80 meter Novice privileges.
10 Meters	28100-28500 kHz	A1A	Morse code privileges. (200 watt PEP output)
	28100-28300 kHz	A1A, F1B	Digital privileges and Morse code. (200 watt PEP output.)
	28300-28500 kHz	A1A, J3E	Sideband voice and Morse code. (200 watt PEP output.)
1.25 Meters	222.1-223.91 MHz		All Amateur modes and emissions authorized. Novices may not establish or be control operators of repeater, auxilliary or beacon stations. This ham band does not exist except in our hemisphere. (25 watt PEP output transmitter power levels for Novice operators only. Technician and higher may operate at full Amateur power levels.)
0.23 Meters	1270-1295 MHz		All Amateur modes and emissions. Same restrictions as above 1.25 meter band but Novice (only) transmitter power level limited to 5 watts PEP transmitter output.

BEGINNER'S CORNER

If you are new to monitoring or have a question about something you don't understand, please write to me at the address given below, and I'll try to answer you. When posible, your questions and answers will be printed. For those who wish an immediate reply, please send a self-addressed, stamped envelope.

John P. Leth-Nissen, Rt. 1, Box 101, Benton, KS 67017

YOUR MAILBOX: As the PC churns with various alpha/numerics competing for a role in the August column, BC has finally dug out from under the hefty mailing spawned by the July 'Frequency Resources' column. My apologies to those who had to wait a couple of weeks for an answer. BC's commitment is to directly respond to all inquiries and suggestions, so hopefully there was something in the responses worth the wait. Please continue to jump in with your inputs at any time as July's mail was exactly the sort of mail that will make BC Your Column!

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CORRECTION: Last month's reference to Jepson aeronautical charts undoubtedly fell short in accuracy and completeness. **Jeppesen** - Low Altitude En Route charts (U.S. covered in 16 regions) each have a section listing frequencies for every airport in that geographic area. To insure ordering the right chart, send for a catalogue to; Jeppesen-Sanderson, 55 Inverness Drive East, Englewood, CO 80112-5498. Hope its right finally and thanks once again to CASD-078.

++

INPUT: CATO-002 has forwarded an informational copy of the FCC Information Bulletin (Aug.84 #7) entitled Private Radio Services. This is a 21 page document filled with a lot of useful and historical information describing the six major catagories of regulated and monitored (by the FCC-possibly also you) radio systems. A nice plus feature on the last page is a spectrum usage (allocation) diagram covering 300 KHz up to 3000 MHz. If you are interested in how Private Radio systems evolved, which FCC rule parts apply to various services, or definitions related to the composition of radio systems (FX, MR etc), you may want to get with your local FCC and see about getting a copy. If you are unable to come up with a copy, rest assured that BC will be covering and expanding on most of the topics in that pub starting with this issue. Thanks to CATO-002 for sharing the wealth!! PS-Anybody out there having information on current books that provide a good introduction to monitoring...we'd sure like to hear about them.

++

INPUT: CAOR-100 forwards this bit of history concerning a past effort to expedite contacts between interested members....Some years ago a Canadian Member assembled a registry for interactive members called a Sociable Directory. These names along with registry dues (a $1 or $2 each to cover costs) were forwarded to RCMA in camera-ready format, printed and distributed. BC recalls this bit of history for its readership and solicits votes of interest in repeating or improving on that one-time concept. The objective here is to measure interest and hopefully come up with a low to no cost system that respects member privacy while providing up to date information. Thanks to CAOR-100.

++

INQUIRY: TN-035 puts forth the following inquiry of general interest; "If you have a frequency of say 493.4625 but your radio will only program 493.462 can you still receive a clear signal and what is the puporse of the seventh digit?" (The digit 5)

RESPONSE: The background for an answer to your question can be found as an extension of the material covered in September's topic, Radio

Transmission Components (copy enclosed). By way of quick review, MODULATION was defined as the process of imposing relatively low frequency (Audio Intelligence) variations on relatively higher frequency electromagnetic (Radio Carrier) waveform. (Note-For those that just joined the discussion, a to-date index of BC topics is available SASE. If you want a copy of a particular column, include a $.39 SASE for each month ordered. An annual index will be in the December issue.)

ONWARD - A radio transmission takes place around a specific CENTER FREQUENCY (communications channel). The variations above and below the center frequency needed to accomplish modulation define its bandwidth limits. The example channel you provided was 493.4625 MHz which we can call the Carrier Frequency.

For our purposes FM transmissions may generally be described as falling into one of two major sub-types, FM wide-band and FM narrow-band. Wide-band is used by commercial broadcasters to modulate the wide musical AUDIO FREQUENCY range of 30 to 15,000 Hz. To modulate properly in FM wide 493.4625 requires a channel bandwidth of plus/minus the highest audio frequency from 493.4575 MHz to 493.4775 MHz. In order for the next commercial channel to not overlap the first, its center frequency (CARRIER) would have to be spaced at least 30 KHz away from the first CARRIER and for practical purposes a little bit more than that.

FM Narrow-band is what you should expect to find in the 493 MHz range. Narrow is used to transmit the narrower range (6000 Hz) of audio frequencies typical to the human voice. The FM narrow-band requires only a 6 KHz (0.0600 Mhz)bandwidth which means that channel spacing can be much closer when transmitting voice coms. Music transmitted within a 6KHz bandwidth would sound very flat as the high treble instruments would be cut-off. Voice reproduction suffers little if any degradation inside 6KHz.

The second part of the question deals with tuning in at 492.4620 which says that the receiver can get within 0.0005 MHz (500 Hz) of the center frequency. As the receiver is looking for variations in the order of plus/minus 6000 Hz, it will most probably decode an intelligible reproduction of the original audio. The quality of reproduction will vary with the quality and features of the receiver. It is not unlike tuning to your favorite commercial FM broadcast. If your car radio is tuned right on, you receive the best quality. But you can still get the station by tuning slightly above or below. (Note: Tuning to the limits of the receiver's resolution of a center frequency or tuning to a harmonic (image) multiple are two effective ways to circumvent its design limits and receive a greater variety of frequencies. More on images in a later installment.)

The last digit then, represents the precise frequency allocation made by the FCC. Such allocations are based on maintaining proper channel isolation and all transmitters are strictly required to maintain center-frequency and bandwidth components of their rf signal (amongst other things). FM spacings depending on where they are allocated can vary between 12.5 KHz (0.0125 MHz) through 25-30 KHz (0.0250 - 0.0300 MHz.) In the case of the 12.5 KHz, this spacing approaches the minimum 6 Khz bandwidth required for voice coms. Using our example the three adjacent channels would be spaced as follows; 493.4500 MHz - 493.4625 MHz - 493.4750 MHz

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INQUIRY: The mailbag is never complete without some questioning reference to what kind of radio system is being monitored?..what about the other half of the traffic?...etc.,etc.

RESPONSE: Private Radio Service (PRS) is an FCC generic term used to describe non-commercial-broadcast radio systems. The word Private could be somewhat misleading as this catagory includes a variety of government (public) agencies, businesses (private & corporate), aviation & maritime radio, Amateur (Hams), Fixed Microwave (telecommunications) and even some recreational uses (like CB.) These applications include both two-way radio as well as one-way broadcast

applications like paging services, radionavigation beacons and yes, even RADAR (Radio Detecting and Ranging). In a nutshell, most of the meat and potatoe activities that relate to monitoring.

Two-way radio systems can first be classified into one of three basic types of operation. The first is a **SINGLE FREQUENCY SIMPLEX** system. As the term simplex implies, this was the basic historical configuaration from which more sophisticated systems later evolved. With all system units on one frequency, only one unit at a time was able to talk. If two or more units were to key up, they would walk on each other's signal and garbled interference would result. Base stations with high towers could have coverage (Xmt/Rcv) over a substantial area, but mobile (portable) units with less power and elevation were limited at best to rf line-of-sight. The staying power and utility of this rather simple approach should not be undervalued as a great number, if not the majority of public/private systems in these times are effectively operated in this mode. This is the easiest type of system to monitor as you get everything one one channel and the proximity of mobile units can readily be estimated the the strength of their signal. When monitoring a number of single frequency systems, selecting the scan delay option increases your chances of hearing the call back. Without delay, the scanner will go to the next active frequency and the original traffic may conclude before you get back.

The next evolutionary step was the **TWO FREQUENCY SIMPLEX** where a base would transmit on one frequency and receive on another. Conversely the mobile units would transmit on the base receive freq. and receive on the base transmit freq. Among other applications, this approach still enjoys popular use in rural public saftey agencies and a number of state highway patrols. The dispatching base has an open channel at all times, even when a mobile is transmitting. It is also not uncommon for mobiles to use the base TX frequency at low power for short range car-to-car coms relieving the dispatcher and remaining units of unnecessary clutter. While this system is still governed by simplex talk-or-listen etiquete, it did provide some improved utilities. If you are hearing only the base or mobile half of an obviously two-way system, a search mode check of close neighboring frequencies will usually net the missing half. When monitoring this type of system, the scan delay option should not be used if you want any kind of a chance to monitor both sides of the communication. This type of system is at times referred to as 'half or semi-duplex'.

The third step resulted in part from efforts to increase mobile-to-mobile range (talk-around) and extend base-mobile range. By adding what amounts to remote controlled transmit/receive facilities, the **TWO FREQUENCY DUPLEX** system was evolved. , While saving the specifics on hardware for a later installment, this configuration made telephone type conversations (receive while talking) a reality. The key to this system is that the mobile output frequency is repeated on the base frequency. All units in the system hear base<>mobile and mobile-to-mobile traffic. To monitor base<>mobile<>mobile traffic select the base transmit frequency and use scan delay as with single frequency simplex. If you load the mobile transmit frequency you will hear close up mobiles transmitting to a Base Repeater. In this system, discrete mobile<>mobile communications are typically accomplished on a third frequency operating in a simplex mode. In the VHF region, spacing between input and repeater frequencies varies, but they are most often in close proximity or sub-band allocated to that particular service. For UHF duplex the spacing 450-570 MHz region is typically 5MHz and from 470-512 the spacing is typically 3MHz. Base stations, repeaters and mobile relays invariabley transmit on the lower frequency. Depending on system configuration, mobiles may transmit on the lower frequency, but most typically are on the higher one.

These three catagories then, constitute the building blocks for many types of radio systems from the small and simple to large and complex. Users may operate a single frequency simplex or use quite a few frequencies that can be switched into assorted simplex and duplex configurations. Hopefully this discussion of the three basic catagories will clear up some of the confusion as to what you are or are not hearing on PRS and where you may want to search for the rest of the traffic. More to come on this later as for now either time, space and/or the editor seem to have expired. John KS-036

Aircraft Frequency Directory
VHF and UHF

Control Towers
ARTC Centers
Approach/Departure
F S S
Unicom
Thunderbirds
Emergency Procedures
Parachute Jumping
Traffic Watch
Monitoring Techniques & More

DC Enterprises
7887 Brandy Circle
Colorado Springs,
Co. 80920
$11.95 includes
Postage

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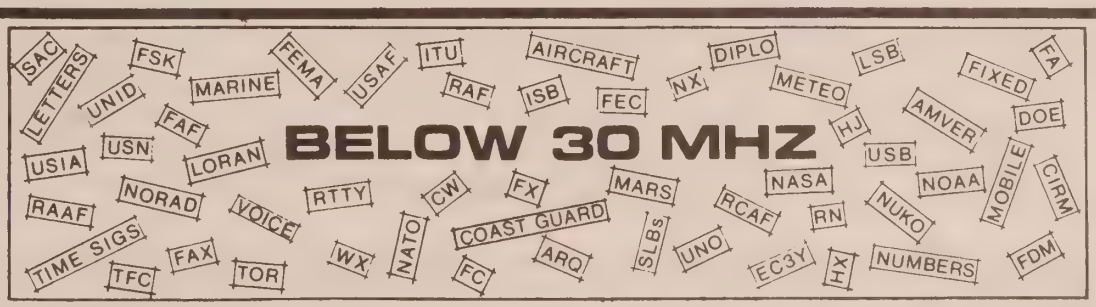


This column is for HF AM, CW, SSB,RTTY and FAX reception reports, notes, articles, and questions related to HF utilities. Services covered in this column include aeronautical, coastal/marine, weather, government, military and 'spy' stations—essentially everything except broadcasting, CB and amateur radio.

Hugh Stegman, 4354 Coolidge Ave, Los Angeles, CA 90066

Spook Radio?

We refer, of course, to the cynical term that has come to describe members of the intelligence profession (supposedly the world's second oldest one). These guys, invariably visualized in their World War II incarnation with dark suits and clandestine Hallicrafters radios, have traditionally added much of the romance to utility listening.

Veteran readers of this column might have been amused by Geoff Halligey's The Spy, who never seemed to communicate any real information besides his physical presence and an occasional "Merry Christmas." Well, a similar CW sked has popped up on 13267, nightly at 0445 UTC.

First intercept here was 6 July (UTC date). It is in the trusty computer as "VVV DE LMY", with a note that conditions didn't support a path to a Norwegian station. (I like to give these people the benefit of the doubt...)

Other nights a typical callup is "2V 2V 2V 2V 2V DE ZSV QTC," followed by a number of short third-party messages in 5F number code format. Other callsigns mentioned are "FM 2W TO 4W 2J IS 3A36 ES 4W IS 5ADD... FM RPM RPM..."

The station passing the traffic is distinguished by a horrible, chirpy, almost raw AC buzz that almost certainly indicates a failing power supply. The operators on the other end have good signals, but rather sloppy sending "fists".

About a week ago, our benighted buzzer developed a bad drift in his transmitter. Several nights of futile, comical calling ensued, while the guy's frequency dropped so fast that listeners needed to keep one hand on the tuning knob. Someone must have asked a tech what to do, because now the guy's contacts simply work "split", chasing him down the band, to 13260 if necessary. Presumably The Spook himself is "rock bound" (no VFO, just crystals) and can't retune. Anyway, he never does. It's hard enough being a Spook... a guy can't even count on a decent radio...

There is a lot of this stuff up and down the bands. When conditions are good, thirty stations can be logged in a couple of hours. The ones that ID at all seem to use tactical calls (no, The Spook is **not** Norwegian!). Some of them seem to be practicing code on the air (and they usually can use the practice!).

I doubt that all are Spooks, though some most certainly are. It is easy to write off Morse code and little woozy radios in this age of satellites, but even a 3-foot dish gets more attention than a wire and a portable set. Dishes raise enough of a flap in L.A., where owners are sometimes accused of pirating signals, or at least of cluttering up the neighborhood. Imagine the effect in El Salvador...

Step Away From That Mike!

On July 28, 1987, the FCC put a sudden end to the 3 day career of Radio New York International. High seas pirate broadcasting came to the northeastern United States when a group anchored a Honduran registered rust bucket one mile outside the three-mile limit near Long Island.

According to listener reports, RNI had a respectable signal strength just above the AM (MW) broadcast band. While they advertised a frequency of 1620 KHz, a listener going by the name of "Phil" found them some 350 Hz low... more drift problems?

They were also claiming an FM frequency of 103.1 MHz, but nothing was heard. In any event, the Coast Guard, accompanied by FCC inspectors and camera crews, boarded the well-antenna'd vessel, forcing a widely heard QRT. On our local TV channel 13, I saw a couple of hirsute men being led away in custody, proclaiming something to the effect of, "Support Free Radio!"

Tapes of this sign-off are already collectors' items. It will be interesting to follow the legal progress of this case, in which we will find out how a government which funds Radio Marti can justify an operation in international waters. Supposedly ITU Region 2 rules had been violated... we shall see.

I would like to hear from anybody who heard this station. By the way, their QSL address was advertised as:

RNI, 496 La Guardia Place, Suite 451, New York, NY 10012

Don't be in a hurry.

(Thanks to Bob Parnass, AJ9S, for part of this story.)

More Pirate Ships

This sort of high seas pirate used to be fairly common off the

British coasts, when the BBC was failing to play enough popular rock tunes. Stations developed wide followings, and their stickers plastered everything. There were many tales of violence, mostly between the pirates themselves, and at least one ship is now enshrined in the briny deep.

Los Angeles is a laid-back place. Our sole attempt in this medium came in the early seventies, when the notorious Paul Krassner bought an old ship and anchored it three miles off Santa Monica. I could see it from my living room window. Krassner is known as the publisher of The Realist (one of the weirder underground magazines), and now does stand-up and radio comedy. "The Iran/ Contra Comedy Hour" gives you some idea of the content.

Any station run by this guy would have been worth a listen. However, "Radio Free America" never happened, and now when we go surfing all we see out there is oil tankers.

Last Add - Pirates

In any event, as long as people are driven by the urge to play broadcaster (or at least outlaw), there will be pirates. Also, as long as commercial stations imitate the same tired demographic formulas, there will be an audience.

Here I've logged "KRZY", crazy all right, with lots of demented howlings on the air, and "KQRP", which is now (K) QRT. Both were in the favored pirate band just above 40 meters, approximately 7300 to 7500 KHz, and especially 7435. For obvious reasons, schedules are completely irregular, but Friday and Saturday nights (U.S. time) are popular.

Also check CB channels. Quite a few local CB'ers here have discovered that they can play DJ and nothing will happen to them. One guy in Burbank gives his address and dares FCC to come and get him. They probably will. Meanwhile, he has rather good taste in jazz.

This column will come out just about when the fall propagation is cranking up. We will probably continue to see sudden, dramatic increases in solar activity alternating with dead periods, but now they will have a dramatic effect. Warm up those receivers - 73.

BUSINESS, ETC.

This column is for reporting frequency and radio system information for the following services: business, forest products, petroleum industry, special industrial, manufacturers, motion picture industry, security (private patrol, detective agencies, campus security & police, amusement park & stadium security, shopping center & mall security, plant/business/hotel security, etc.), General Mobile Radio Service (GMRS), mobile phone/RCC & paging, trucking firms, bus lines, taxi cabs, tow trucks, utility companies (private & municipal water, power, electric, gas, telephone, etc.) and all school & college related frequencies.

Send business monitoring information west of the Mississippi to:
Cliff Polkinghorn, 2580 Parkside Drive, Union City, CA 94587

WELCOME TO OCTOBER 1987. BUSINESS, ETC. WEST.
THIS MONTH WE HAVE A CONTRIBUTION FROM DANNY GARCIA
NM 018.

CARLSBAD, NEW MEXICO

B&E INC.		43.00
CARLSBAD IRIGATION DISTRICT		48.42
CARLSBAD CABLEVISION		151.805
WALLACH CONCRETE		151.925
SPRINGTIME CLEANING SERVICES		151.955
CAPROCK DISPATCH		152.150
CAPROCK COMMUNICATIONS		173.640
McCABE TAXI AND TRANSPORT	(BASE)	152.270
McCABE TAXI AND TRANSPORT	(MOBILE)	157.530
CARLSBAD ANSWERING SERVICE		152.665
ROWLAND TRUCKING CO.		154.490

GAS COMPANY OF NEW MEXICO (CITY)	158.310
GAS COMPANY OF NEW MEXICO (PIPELINE)	153.095
GAS COMPANY OF NEW MEXICO (MOBILE)	158.355
SOUTHWESTERN PUBLIC SERVICE CO.	451.150
G.T.E. TELEPHONE CO.	451.350
CONSTRUCTION INC.	463.475
FORREST TIRE CO.	469.650
GUADALUPE MEDICAL CENTER (MED. PAGING)	163.250
TRANSWESTERN PIPELINE CO.	153.200

THANKS DANNY

A CONTRIBUTION FROM KERRY COCHRAN CA SM 013, PART OF WHICH WILL BE REPRINTED HERE, IS QUITE LONG. I WILL SPREAD IT OUT OVER A FEW MONTHS.

SKI AREAS

154.515	BEAR VALLEY	BEAR VALLEY
467.8125	BEAR VALLEY	BEAR/NORDIC
154.540	BEAR VALLEY	MOUNT REBA
460.9875	BEAR VALLEY	MOUNT REBA
463.450	BIG BEAR LAKE	SNOW SUMMIT
463.700	BIG BEAR LAKE	SNOW SUMMIT
151.715	CARSON PASS	SUNDOWN
155.280	NORTHRIDGE	SO. CAL. NORDIC SKI PATROL
155.160	EUREKA	HORSE MTN SKI PATROL
151.715	HOMEWOOD	TAHOE SKI BOWL
153.785	INCLINE NEVADA	INCLINE
151.925	LAKESHORE	CHINA PEAK
463.500	MAMMOTH LAKES	MAMMOTH MTN SKI AREA
464.950	MAMMOTH LAKES	MAMMOTH MTN SKI AREA
464.125	MAMMOTH LAKES	MAMMOTH MTN SKI AREA
463.325	MAMMOTH LAKES	MAMMOTH MTN SKI AREA
463.275	MAMMOTH LAKES	MAMMOTH MTN SKI AREA
151.835	MAMMOTH LAKES	MAMMOTH MOUNTAIN
151.955	MANZINITA LAKE	LASSEN NAT'L PARK
151.865	MOUNT SHASTA	MOUNT SHASTA
151.835	NEVADA COUNTY	BOREAL RIDGE
151.925	NEVADA COUNTY	DONNER SKI RANCH
462.575	NEVADA COUNTY	DONNER SUMMIT TRAM.
464.325	NEVADA COUNTY	ROYAL GORGE/NORDIC
154.570	NEVADA COUNTY	SUGAR BOWL
154.600	NEVADA COUNTY	SUGAR BOWL
154.600	NEVADA COUNTY	TAHOE-DONNER
155.340	NORTHRIDGE	SO CAL NORDIC PATROL
155.220	NORTHRIDGE	SO CAL NORDIC PATROL
35.96	PINECREST	DONNER RIDGE
154.600	PLACER COUNTY	SUGAR BOWL
462.575	SODA SPRINGS	DONNER SUMMIT TRAM.
155.340	SUN VALLEY	SO CAL NORDIC PATROL
155.280	SUN VALLEY	SO CAL NORDIC PATROL
155.220	SUN VALLEY	SO CAL NORDIC PATROL
151.895	TAHOE CITY	ALPINE MEADOWS
151.895	TAHOE CITY	ALPINE MEADOWS
151.865	TAHOE CITY	DEER PARK SKI AREA
154.540	TAHOE CITY	SQUAW VALLEY
463.500	TAHOE CITY	SQUAW VALLEY
154.570	TRUCKEE	NORTH STAR RACE TEAM
157.620	TRUCKEE	NORTHSTAR
151.865	TRUCKEE	TAHOE DONNER
151.685	TWIN BRIDGES	ECHO TAHOE
151.925	TWIN BRIDGES	SIERRA SKI RANCH

THANKS KERRY

THATS IT FOR THIS MONTH, WE WILL SEE MORE OF KERRYS' CONTRIBUTION NEXT MONTH, AND I HOPE SOME CONTRIBUTIONS FROM OTHER MEMBERS.

Send business monitoring information east of the Mississippi to:
Brandt Niemuth, P.O. Box 541, Rosemont, IL 60016

From the PS - SE Editor, Jorge L Rodriguez, comes the following listing for the PTL Network Headquarters, Heritage USA, in Ft Mills, South Carolina:

151.925 WNCY450 Heritage Village Church
152.48 KNFE365 Heritage Village Church (ed: Paging freq)
461.175 WNDK527 Heritage USA Inc
463.7 WQS 393 Heritage Village Church
464.075 WXA 575 Heritage Village Church
3700.000 E9138
3925.000 E9138
23025.00 WNEF 679

The last three are thought to be microwave links for satellite operations. Any confirmations or additions are appreciated.

From Scott Lowry (IL-179) comes an update for the State of Florida:

Walt Disney World:

464.4 Security F-1
464.125 Security F-2
463.75 Security F-3
462.65 Maintenance F-1
462.675 Maintenance F-2
463.975 Maintenance F-3
462.55 Operations F-1
462.575 Operations F-2
462.625 Operations F-3
461.6 Fort Wilderness
461.7 Buena Vista Construction
464.625 Utilities
464.8 Resorts
462.475 Water Treatment

Sea World:

462.000 Operations
464.3875 Parking Lot
464.825 Security
464.775 Avis Rent A Car - Orlando
464.375 Cypress Gardens - Operations & Security
464.875 Cypress Gardens - Maintenance
464.775 Daytona Int'l Speedway
464.9 Daytona Int'l Speedway
154.515 T W Services - Kennedy Space Center
154.6 T W Services - Kennedy Space Center
464.375 Liom Country Safari - West Palm Beach

Chicago Update:

464.325 KNDB404 Highland Park Hospital

CANADA

Send Canadian frequency information, radio system details and other information relating to Canadian monitor listening and questions to:

Rob Berezowski, 310-4045 Rae St, Regina, Saskatchewan, Canada S4S 6Y8

Greetings everyone and welcome to the October Canada column. This column is being written while it is sunny and warm here. By the time you read this it will probably be cold. Let me assure you I am enjoying this weather while it is still here.

My first topic this month concerns the B.C. Hydro and Power Authority. A "VHF Mobile Radio System Map" has stumbled into my possession from an anonymous source. One problem with the map is that it is dated April 1975. The other problem is that I can't put it into the column. After reduction for the newsletter the already small print showing the channel numbers would have disappeared into oblivion (lost forever, somewhere deep in the bowels of some photo reduction equipment at our newsletter printing facilities). I have however extracted the following list of frequencies for the B.C. Hydro radio system. Each site is accessed using a two digit touch tone signalling system. A mobile unit on one repeater may only access another repeater in the same area. (This is because of the way the interconnecting UHF and microwave trunks are arranged).

B.C. HYDRO AND POWER AUTHORITY

Channel	Repeater Out	Repeater In	Location
A	165.930	165.300	All Regions
B	166.290	165.570	Central Interior
C	166.200	165.480	Southern Interior
D	166.290	165.210	Metro (Vancouver)
E	166.170	165.420	Fraser Valley
F	165.480	166.200	Victoria
G	165.360	164.730	Duncan
H	165.180	166.185	Nanaimo/Alberni

It is unfortunate that I cannot put the map into the column, but if any member is interested, I can supply a copy for an SASE. Remember, the map is 12 years old, and I can't guarantee the accuracy of the information, but those that desire the map will find the information helpful in monitoring the system as it exists today. Undoubtedly there will have been changes over the last decade. For those who are not interested in power utilities, I suggest you try listening to your local power company. As an electrical engineer, I find all of the service crew conversations interesting, especially during a major outage. I realize that the average hobbyist may find a lot of it boring, but it may become very interesting as you sit in the dark waiting for the lights to come back on. Try plugging your local power company frequency into your scanner, you may find it worthwhile.

My next item is from Bruce (CANA-019). He sent in a couple of newspaper clippings, both of which appeared in the Toronto Star. The first one was a column written by George Gamester that I have to share with you. It deals with pagers, and the adventures that those little units go through in everyday life.

Electronic Pager Stops Startled Thief In His Tracks

"For a few seconds after the purse-snatcher struck, the quick-thinking woman was in shock. Then she had a brainwave. Racing to a pay phone, she dialled a number and yelled into the mouthpiece. A block away, her voice squawked from inside her handbag: "STOP! Thief!" Startled, the snatcher immediately dropped the purse - which was recovered by passers-by and eventually returned to the rightful owner.

"Funny things happen with electronic pagers - as we learn from chats with Toronto's two leaders in the field, Maclean-Hunter Paging and TAS Pagette. With nearly 50,000 pagers in Ontario and demand growing by more than 20% each year, you'd be surprised who's using pagers.

"Consider this all-too-common dilemma for Mom: Dinner is ready. But little Bobby is out playing with his pals, somewhere beyond yelling range. How to get him home before the lasagna goes hard? No problem - just beep his pager for only $17 per month.

"Of course, those gadgets do more than beep these days. Some discreetly vibrate to get your attention (a big improvement on the type that beep their loudest during a tender scene on the movie screen or a quiet passage at the concert). Some pagers talk. Some print out phone numbers to call. The latest 'alpha-numeric' model will screen numbers and words while recording up to 20 different messages in its memory chip. It only costs $60 per month.

"Just the thing for undercover Metro Toronto Police. Trouble is, the Bad Guys are using them too because it's a form of communication the police can't tap. Even call girls are using them, they say, to co-ordinate their appointments.

"Mind you, not everyone is crazy about those pagers. There's nothing like a beeper going off in a purse or briefcase to send crowds scattering at Pearson International Airport. Of course those infernal things always start beeping when you're in the middle of a traffic jam, at the height of a rainstorm. One woman said her beeper invariably goes off in McDonalds, "sending the girl behind the counter straight to the french fry machine." We dare not detail the times beepers carried by airline pilots, medical personnel and other essential service workers go off at, ah, intimate moments.

"No wonder some of those pagers come into the repair shop after being stomped on, run over by cars, dunked in buckets of paint or nearly flushed down toilets.

"Still, they can be lifesavers, and it's nice to know some people are always on call. Like the doctor at Sunnybrook Medical Centre who takes his pager with him (wrapped in plastic) whenever he has a shower. Now, that's staying in touch!"

Bruce's duties with the Peterborough Fire Dept require that he also carry a pager. Like everyone else, Bruce's pager has had a few interesting travels. One night he left his pager in a friend's car. Bruce phoned him about it, but he couldn't find it. The next morning the friend was driving to work when the Radio Test came over the air. He then had a wild time tearing his car apart, finding the pager under the rear seat. On other occasions, Bruce has had the fire dispatcher trigger his unit so that he can find it at home after someone "put it up" for him. The biggest nuisance is when it triggers a store security system or starts howling when Bruce approaches a supermarket cashier because the cash register is emitting a signal on or near his frequency. As Bruce says, "the joys of an electronic leash."

Personally, my favorite is the businessman who discreetly sets off his own pager to get out of a particularly boring meeting. I have heard of a new twist though. There is the pager that you can set to go off in about 20 minutes or so, making those meetings short and sweet. Some of the messages heard over the air can be interesting as well. My brother Rick's new pager has a button that can disable the squelch, allowing him to hear all the messages being paged. He heard one male voice say something like "Call the shop NOW, or don't bother coming into work tomorrow." One sure wonders about messages like that.

Bruce also has a happy story to relate about his scanner and the help of RCMA. Bruce's Bearcat Monitor had quit, and he could not locate schematics to service it. Bruce placed an ad in the RCMA Contact column for help. Several members wrote to him to advise him to pick up a SAMS manual. Unfortunately these books are not readily available in Peterborough, and the particular edition he needed was out of print. Finally, Howard Katsiff (NJ-149) came to the rescue with a photocopy of the circuit diagram. A local Ham operator traced out the circuit, located the trouble, and now the radio works fine. A capacitor in an oscillator circuit on the IC that controls the readout had failed. RCMA to the rescue. Bruce sends his thanks to Howard.

Thanks for writing in, Bruce, and thanks very much for the amusing stories on the pagers.

Now we move on to more serious topics. Greg (CANA-126) wrote in with some information on Kitchener and area. First Greg reports that the OPP in the Kitchener area are on 42.060/42.220, with the patrol helicopter stationed in Brampton using 42.000. 42.060/42.220 is also used by the OPP east of Kitchener to Toronto (Downsview Detachment), and north to Barrie. West of Kitchener 41.960/42.020 is used in London.

Greg supplied the following list of frequencies for the London, Windsor, and Toronto areas:

London Police Force	XJF25	Ch 1	142.035
		2	142.305
		4	142.875
		5	142.995
		6	142.695
CN Police London			160.935
London REACT			172.530
Windsor Police		Ch 1	142.035
		2	142.215
		3	142.875
Toronto Police Force	Division 31 Desk 4		142.035
	" 32,33 Desk 3		142.065
	" 41 Desk 7		142.125
	" 42,43 Desk 5		142.155
	Harbour Patrol		155.490

Greg also notes that the Toronto Police Force uses channel markers on their system. I'm sure the markers have some sort of legitimate

purpose, but their presence tends to discourage monitoring. That is not a nice thing to do. Thanks very much for writing in, Greg.

My next letter comes from a member in B.C. who wishes to remain anonymous. He reports that the RCMP are using 140.100 (R) for coverage along Highway 99 from Horseshoe Bay north to Squamish. (Squamish is about 50 km north of Vancouver) The repeater is referred to as Watts Point or South Repeater, and most often car 29C2 Squamish Highway Patrol uses it to communicate with Squamish. Highway 99 has been in the news on a number of occasions over the last few years because of the high number of deaths on the road, and because of all the rock slides and heavy rains washing out the road. This highway is the only route to the popular Whistler Ski Resort.

Just east of Horseshoe Bay along the Trans Canada Highway is Cypress Provincial Park (just west of West Vancouver). In the summer there is hiking and picnic facilities, and in winter there is a ski resort. Our anonymous member reports that 173.355 is used for ski resort operations.

Our friend also reports that the Delta Police have moved to an 800 MHz system. There is no longer any activity on 159.150. It is suspected that they are using a trunked 800 MHz system, but the new frequencies have not yet been found.

Canada Fisheries enforcement officers seem to have changed frequencies. Activity is no longer heard on 143.145 for the BC Lower Mainland. It is suspected they may have switched to a scrambled channel. A quick look in one of their vehicles showed that there are two radios stacked on top of one another. The top radio had an antenna mounted inside the car. The other radio must have used the external antenna mounted near the trunk. Let's hope someone out there can solve some of these mysteries.

Metro Transit in the City of Victoria use 452.7875 (R) for transit supervisors, and is referred to as channel 1. They mentioned a channel 2, but our anonymous member is not sure what this frequency is. Our friend lives in the BC Lower Mainland and on occasion can receive the channel 1 repeater, depending on local weather conditions.

Our friend also reports that the 422 MHz frequencies used by Expo now all appear to be inactive. Expo site Security is now on 460.6375 (R). Expo site Operations are now on 460.9125 (R). Basically the only buildings still open now are the Expo Centre (the big domed building), the BC Pavilion, and some of the buildings around the Plaza of Nations.

Also our anonymous contributor reports that on 141.120 (both simplex and repeater used) is a private ambulance firm serving Vancouver and the B.C. Lower Mainland. This company provides only non-emergency service, transferring patients to/from hospitals. The only unit numbers heard on this channel have been Medic 3, 4 & 5.

The following list of frequencies for the BC Lower Mainland was also passed along by our anonymous member:

Communications Canada (simplex & repeater)	149.080
Riverview Mental Hospital (BC Govt) voice & pager	153.950
Gabriola Island Fire Dept	154.190
University of B.C. (UBC) Service & Supplies	154.570
Roberts Bank coal port operations (Delta)	164.850(R)
Park Royal Shopping Centre (West Vancouver) Security,etc.	169.050
Delta Public Works Dept	171.690
Surrey Public Works Dept	168.855(R)
Vancouver International Airport Maintenance	460.7875(R)
North Shore Mountain Rescue (repeats 158.865 simplex)	462.950(R)

Our friend passes on that the last frequency in the list above is a very good channel to listen to. 158.865 is used for search and rescue operations in the mountains north of Vancouver. During a search for missing persons, the communications on this channel can be very exciting to listen to, as our friend has reported before. With the repeater on 462.950, the hobby monitor will now be able to hear much more of the search and rescue activity, with greater clarity and range.

Even the most boring frequencies can be very interesting at times. Our member reports that 159.720 (simplex) is used by some kind of repair service in Surrey, and is very boring to listen to. However, during "skip" conditions an unidentified American fire dept repeater can be heard. The fire dept repeater is very active, and quite exciting. The repeater has only been heard on heavy overcast days, and

it is not listed in the Police Call for Washington State. If any member can identify this fire dept repeater, I and our anonymous member would be very interested.

Thanks very much for writing in, mystery member. I sure hope we hear more from you in the future.

My final letter this month comes from Marshall (CANA-128). He sent in a few newspaper clippings. The first two are from the Ottawa Citizen of February 5, 1987. They deal with the subject of scanner laws in the aftermath of the death of Sgt Young of the Vancouver PD (see my July 87 column for more info). The first article is the Canadian Press wire story on the incident. There are quotes from B.C. Attorney General Brian Smith saying that any laws restricting scanners must be considered cautiously. Smith said that the use of scanners for unlawful purposes should be banned, but in the process the law must not prevent the many legitimate uses of scanners. It sure sounds like Smith is on our side.

The other newspaper article talks about Ottawa criminals being caught with scanners. Ottawa Police Staff Inspector Jim Bickford said there were several instances in the past few years when scanners were used by felons. In a recent drug bust, police found scanners in a building used by suspected drug traffickers. Bickford said it was only luck the police weren't using their radios before they made the bust. Nepean Deputy Police Chief Wayne Phillips said there are two scanners at his station that were taken from burglars, and that he would be happier if scanners were less accessible to the public. The article goes on to describe methods to ensure privacy of communications. Mentioned were mobile data terminals (MDTs) now used by all Ottawa Police uniform cars. The article states that the Metro Toronto Police Emergency Task Force (ETF), the tactical unit specializing in rescuing hostages and other risky situations (i.e. the "SWAT" team), scramble their radio transmissions. Bickford mentioned that it would be too expensive to equip an entire police force with these scramblers, so I am assuming the ETF are using DVP scramblers.

The third clipping comes from the Toronto Star of May 24, 1987, and provides the following marine frequencies in use in Lake Erie and Lake Ontario:

U.S. Coast Guard-working frequency	Channel 22A	157.100
U.S. & Canada Emergency frequency	Channel 16	156.800
Seaway frequency - Lakes Erie & Ontario	Channel 11	156.550

Thanks for the clippings Marshall. As of this date, I have not heard anything further about the Vancouver shooting. Things seem to have quieted down. The coronor's report has not yet been released, and there has been no further mentions of scanner laws being written.

That's all for this month. I only have room to say best wishes to you all and see you next month.

contact info wanted

This column has two purposes: to help members contact each other, and to help member obtain directly from one another information on various subjects related to 2-way communications monitoring. If you would like to meet, converse or correspond with, other members by telephone, letter, or cassette, this column is the place to state your interest. Remember—those who respond will do so directly, so be sure to provide your phone number, the best time to be called, and/or your address. Write to:

Scott Mattson, 2820 Bridge Ave, Point Pleasant, NJ 08742

Requests for copyrighted material or information considered 'sensitive' by RCMA will not be printed in this column.

INFO WANTED: I need information from all 50 states and provinces of Canada pertaining to monitoring laws.
ROGER W. WEST (MN-052) Editor "Monitoring & the Law", P.O. Box 366, Wyoming, MN 55092

INFO WANTED: Help! I am desperately looking for companies that supply scanners, antennas, and other related equipment, especially those that supply catalogs.
BILL MANION (MO-104) 2102 B Ridgewood, Harrisonville, MO 64701

CONTACT WANTED: I wish to exchange frequency information with members in Pennsylvania, especially in the Pittsburgh area.
BOB APPLE (PA-223) 1312 Hillsdale Dr., Monroeville, PA 15146

INFO WANTED: Calling all San Diego and Houston suburban memebers - Anyone familiar with any suburban fire station locations, could you jot down a quick list and send it to me? I cna pay you back with some exciting cassettes or some business or utility or local government frequencies from your hometown.
PETER SZERLAG (MA-154) 24 Albermarle St., Arlington, MA 02174

This month, sorry to say, brought no member input with the exception of some electronic mail regarding the usage of People Link for the RCMA electronic communications system. Since work has kept me extremely busy, I haven't had a chance to contact the People Link to investigate rates and requirements. Hopefully next month I will have something for you.

This months starts the first of a series of articles/tutorials dealing with Packet Radio. I find Packet just fascinating in respect to the hobby. It combines my two main interests, radio and computers. An amateur in my local area is heavily involved in Packet and provided me a great demonstration and introduction to the hobby. I hope that you find it as interesting as I have. It has even given me a little more incentive to get the Novice license. Now, if I could just find some time to do it. Maybe this winter will provide a little more free time. Now on to this months topic.....

INTRODUCTION TO PACKET RADIO

Radio amateurs in Canada, Sweden, and the United States have been experimenting with packet radio, a system of computer based communications. This new mode can provide high speed communication with efficient use of the spectrum, and is resistant to interference due to other stations and to signal degradation due to adverse band conditions. Not only can packet radio be used for informal amateur QSO's and traffic handling, but it has additional possibilities for exchange of data between hams with computers, "*bulletin boards*" and message systems, and remote computer programming.

WHAT IS PACKET RADIO?

Packet radio is a communication system in which information is digitally encoded. In this respect it is similar to RTTY or ASCII, but with important differences. These differences are the key to insuring error free reception and at the same time allowing maximum use of the spectrum through shared frequency use.

Data integrity is provided by packet radio through a "*handshaking*" technique and error detection. Along with each transmission, a computed value called a "*frame check sequence*" (FCS) is sent, which allows the receiving station to check for errors. The receiving station acknowledges an error free packet with a special acknowledgement (ACK) signal. If the sending station does not receive such a signal within a certain period of time, it automatically retransmits the packet.

A packet also contains identification of the destination station, permitting several conversations to take place on the same frequency. A packet radio station can automatically ignore any packets which are not addressed to it. Due to the fact that the duration of most packet transmissions is very short, a user does not need the channel most of the time. The time between transmissions is available to other users on frequency. This system is called time domain multiplexing. On a very busy channel, the user will notice an increased delay time before

getting replies to transmissions, but the packet radio equipment will take care of automatic retransmissions and sorting out the replies meant for the station. The user never "*hears*" the QRM.

WHAT IS A PACKET RADIO STATION?

Packet radio requires the use of a microprocessor based controller at each station, and it will obviously appeal to the ham who already has a computer in his shack. However, it does not require that the operator be a programmer, or even that the station have a personal computer. All that is really necessary is a terminal, a terminal node controller (TNC), and an amateur radio transceiver. The terminal can be a simple display (CRT) or typewriter terminal that produces ASCII characters, a personal computer, or even a commercial mainframe computer. What you need is a terminal with a keyboard to allow you to talk and a screen or a printer to allow you to read incoming information. You can even get an inexpensive terminal that uses a TV set for the display.

The way in which most terminals encode ASCII characters is in "*asynchronous*" format. SInce characters are encoded as they are typed, there is a flag consisting of one or more "*mark*" (binary 1) values to mark the beginning and end of each character. The device decoding the characters expects a specific "*baud rate*", or number of transitions from "*mark*" to "*space*" (binary 0) per second during the character, but no particular time interval between characters themselves.

The terminal node controller is the heart of the packet radio system. It has one port that is connected to the terminal or computer, and communicates through it by asynchronous ASCII format at the baud rate required by the terminal. The TNC converts the data stream from the terminal to a packet by attaching a "*header*" showing the destination of the packet and control information for the network, a "*tail*" containing the result of the FCS calculation for error detection, and flags to mark the beginning and end of the packet.

The second port of the TNC connects it to the transceiver microphone and speaker audio lines, and the PTT line. Ordinarily, the TNC will produce AFSK modulation by putting one of two tones into the microphone input, corresponding to a "*mark*" or "*space*". In this fashion, the packet is sent out on the air at the packet channel baud rate, which is unrelated to the terminal baud rate at the other port of the TNC.

The receiving TNC reverses this procedure, decoding the audio tones from the speaker audio line of the radio, removing and reading the header and tail information, and passing a successfully received packet to the terminal at the terminal baud rate.

The part of the TNC that does the translation between the sequence of tone levels and the characters is called a "modem", short for MOdulator DEModulator. This device may or may not be built into the TNC board. Most packet radio modems operate at 1200 baud, which corresponds to about 1200 wpm, although the FCC now authorizes much higher baud rates on some amateur bands. The audio tones used are 1200 hz and 2200 hz. This choice of frequencies is that of the Bell 202 modem, which is available as surplus. The final component of a packet radio station is an amateur radio transceiver. Most packet radio activity so far has been in the 2 meter band. The only important requirement of the radio is that its audio frequency response at 2200 hz be adequate. In other words, the 2 meter FM rig you already have is probably just fine.

WHAT THE TNC DOES

The TNC consists of a special purpose microcomputer, containing all the necessary software and hardware to communicate with your terminal, assemble a packet, operate your transmitter and receiver to send and receive a packet, and decode a packet. The special functions of the TNC which would be difficult to implement with an ordinary personal computer are the use of protocol to communicate with other TNC's and real time control.

The encoding and decoding of packets involves a carefully standardized set of procedures called "protocol". The protocol basically determines the exact form of the header and tail parts of the packet. The header allows receiving TNCs to automatically determine the purpose of the packet, e.g., net check in, part of a QSO, or ACK to a previous transmission. The tail contains the FCS which allows the TNC to automatically determine whether the packet was received correctly, and if so, to automatically acknowledge it. Since the protocol is programmed into the TNC, the operator does not need to know exactly what his packet looks like. In particular, he does not need to know how the destination of his packet is indicated. The operator communicates with other amateurs by call sign, and the TNC translates the call sign into the identification required by the protocol.

The TNC is required to perform a number of tasks simultaneously, including responding to events such as the receipt of a packet or instructions from the operator in "real time", in other words, as they happen. This makes programming in BASIC, the common language of personal computers, undesirable. This is because BASIC uses an "interpreter" which reads each line of the program and translates it into machine type instructions every time the line is executed. The time required for the translation would prevent a program from responding rapidly enough in a packet radio environment. In order to meet the speed requirement, an assembly language program or equivalent is required. While BASIC looks pretty much the same on any computer, assembly language is different for every machine. If the TNC were replaced by personal computers, program development would have to be redone for each variety of computer. In addition to maintaining the right pace, the TNC also must be constantly "listening" at both ports simultaneously while putting packets together or taking them apart. The hardware of personal computers may not even be capable of this sort of multi task application.

Programming of individual TNC's must be as easy as possible, since there will inevitably be unforeseen problems in the initial software. In addition, hardware changes may necessitate software changes. For this reason, TNCs are

designed around erasable programmable read only memories (EPROM's), which normally function like the ROM of a personal computer, where the vital software is stored in an indestructible form. However, if the need arises, they can be reprogrammed by "burning in" the new program using special equipment.

WHAT IS A PACKET?

A packet is the basic message unit in packet radio. It ordinarily consists of a text message typed in by the operator, sandwiched between the header and tail information required by the protocol. In a typical QSO, a packet would be encoded and sent out by the TNC when the operator ends a line of typing by hitting the RETURN or ENTER key. In any event, the length of a packet is limited, usually to 128 characters. This helps to prevent a single user from "hogging" the channel, as well as making sure that the sending and receiving TNC's don't get swamped with information.

A packet need not consist of ASCII or Baudot character strings, however. It could contain information in other coding systems, such as BCD or EBCDIC, or even binary data such as a compiled computer program. The TNC, which uses a "bit oriented protocol" based on a standard called High Level Data Link Control (HDLC), can encode any of these equally easily. An advantage to this choice of protocol is that the functions it requires are available on a single large scale integration (LSI) chip, which simplifies the TNC hardware and software. A second advantage of HDLC protocol is that the beginning and end of the entire message are flagged, making the "start" and "stop" bits for each character unnecessary when the packet is transmitted in "synchronous" format.

The "frame" of an HDLC packet is represented below. Each field of the packet is encoded as a sequence of 1's and 0's (bits) to be transmitted as "mark" and "space" tones. With the exception of the DATA field, all these fields are generated by the TNC as it assembles the packet for transmission. The operator is concerned only with the contents of the DATA field.

Flag	Address	Control	Data	FCS	Flag

The FLAG is a unique bit sequence which identifies the beginning of a packet to the HDLC controller. This pattern corresponds to no sequence which would be encountered in any of the other fields, except possibly in the transmission of binary data. Even in this case, there are provisions for distinguishing data from the flag sequence.

The ADDRESS field contains routing information for the packet. This information may include the destination station, the originating station, and possibly intermediate routing information if the packet will be relayed to the destination. The destination and originating stations mights be identified by a network address number of by amateur call sign, depending on the exact form of the protocol being used.

The CONTROL field describes the purpose of the packet to the network. It identifies packets with such functions as network check in or check out request, packet acknowledgements, or request for information from net control. It may also contain a sequence number for a multi packet message which must be received in the correct order.

The DATA field contains the message being sent, which will ordinarily be the text typed in by the user, converted into an ASCII data string. In the case of a packet identified in the control field as performing a control function, the DATA field may be absent.

The FCS allows the receiving station to verify that the packet has been received correctly. If the FCS calculated by the receiving TNC matches the FCS of the packet, an acknowledgement is sent; otherwise the packet is ignored.

WHAT IS A PACKET NETWORK?

A local area packet radio network (LAN) consists of a net control station and a number of individual operators. The net control station is sometimes referred to as the "station node" and the individual stations as "terminal nodes". The net may also contain a digital repeater or "digipeater", which may be the net control station or a separate repeater station. The repeater station may be a single frequency simplex repeater which retransmits any correctly received packets, or it can be "normal" split frequency repeater.

As operators sign on to the net, they are recognized by the net control and given net address codes. An operator desiring to start a QSO with another net station will subsequently have his transmissions addressed to that station. Any operator may choose to have his TNC receive all transmissions, rather than just those addressed to his station. Of course, the TNC will only acknowledge those transmissions intended for that station. The operator whose station is functioning as net control participates in exactly the same way as other operators. The net control functions are taken care of automatically by his TNC.

As more packet radio LAN's become active, there will be the possibility of link stations with access to two distinct LAN's. These stations can be members of both nets and serve as communications links through which packets originating in one net can be funneled to an addressee in the other net.

A more sophisticated possibility is that of a "gateway" station, which will be a specialized station having access to some long distance mode of communications. The gateway station will reformat packets with another layer of protocol containing internetwork linking information and transmit it to another gateway station in a distant LAN. Three possibilities are being explored for long distance links.

TERRACON will be a high speed ground based linking system utilizing UHF and/or microwave relays. It could potentially handle most long distance packet radio communications in the United States and Canada. It will probably be a few years before TERRACON is implemented as a useful system, and somewhat longer before the continent is linked.

AMICON will be a satellite based network utilizing one of the special services channels on the AMSAT Phase III B satellite. AMICON will allow intercontinental linking and contact with isolated areas not accessible to TERRACON. High data rate experiments are being planned for the 23cm uplink/70cm downlink (mode L) translator. There are also plans for a packet radio digital repeater aboard the AMSAT Phase III C satellite.

SKIPCON is AMRAD's projected HF network of LAN gateway stations. The nature of HF propagation will require slower data rates (75 to 600 baud) and error correction as well as error detection protocol. SKIPCON experiments have been conducted since the end of 1981.

HOW TO GET IN ON PACKET RADIO

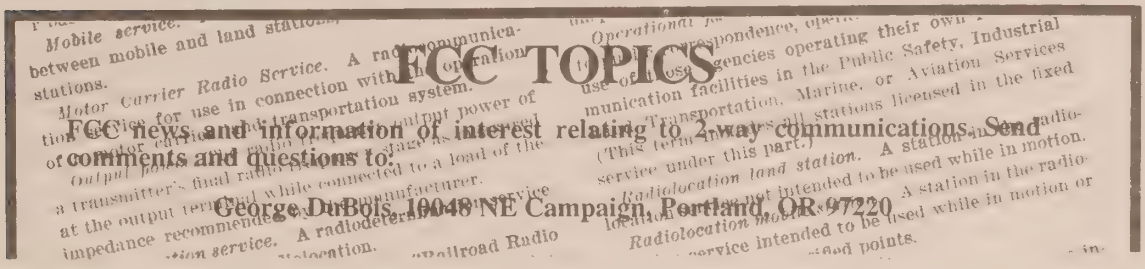
There are currently two TNC designs available. The first packet radio TNC was designed by the Vancouver Amateur Digital Communications Group (VADCG). The Vancouver TNC is available as a bare board, and requires a power supply, and external modem, and parts. It comes with instructions and notes on the power supply. A modem kit is also available from VADCG. The TNC design is based on the Intel 8085 CPU and 8273 HDLC controller and includes 4K bytes of 2114 RAM and 4 K bytes of 2708 EPROM. The TNC requires an 8250 (serial ports) or an 8255 (parallel ports) for interface to the terminal, as well as an interface to the radio.

The Tucson Amateur Packet Radio group (TAPR) is currently testing a second TNC design. This TNC has the modem, radio interface, serial and parallel terminal interfaces, and power supply circuitry (exclusive of the transformer) on a single board. It is based on the 6502 microprocessor (Editor's note: the board will now use the Motorola 6809E microprocessor), and can hold a total of 48K bytes of RAM and ROM on the board. the 1933 HDLC chip it uses is compatible with the 8273 chip used on the VADCG board, and the TAPR TNC will be capable of VADCG compatible protocol. Additional information on TAPR activities is available from Tucson Amateur Packet Radio, PO Box 22888, Tucson, AZ 85734.

Q What's the difference between a used car salesman and a computer salesman?

A The used car salesman knows when he's lying.

Enjoy


FCC TOPICS
FCC news and information of interest relating to 2-way communications. Send comments and questions to:
George DuBois, 10048 NE Campaign, Portland, OR 97220

The FCC has issued a couple hundred modifications to the Order that last year created the Rural Service Areas (RSA's) in the Cellular Telecommunications Service. (This was inevitable!) The Order created about 400 RSA's, each consisting of mostly adjacent counties making up a population of approximately 150,000, all outside the 305 designated Metropolitan Statistical Areas (MSA's). Prior to this, applicants were to define their own service area, of less than 2000 square miles, but no applications for these areas were to have been processed until completion of licensing in the top 305 MSA's. This, of course, created much uncertainty and a delay in implementing service to these areas. The Order set forth a procedure for interested parties to file for modifications to the RSA's, allowing for input from carriers and others with knowledge of the areas. Many of the modifications are deletions of counties which actually are part of adjacent MSA's. Also, a few counties were left off the first list. Many RSA's consisting of non-contiguous counties were split into separate RSA's. Most requests to redefine RSA's along other than county lines were rejected (such as along Interstate highways or phone company toll areas). A major amendment reduces the mileage separation between RSA operators using 500 watts ERP output, and adjacent metropolitan systems, from 100 miles to 24 miles. This, in theory, should still present no more interference than a normal 100 watt transmitter, the maximum permitted in urban systems. Another major amendment eliminates the requirement

to serve 75% of the RSA, since it was pointed out that it would not be profitable to do so in many areas. A licensee may now select his own service area, or areas, within the RSA, even if multiple areas are non-contiguous and even if there is no hand-off between them. The Commission may accept applications for the unserved areas later (but who's going to build a cellular system serving nothing but sagebrush! Don't expect a rush of applications for those areas).

The Commission has streamlined the process for Part 15 authorization of most transceivers. The transmitter portion of a transceiver is required to be type-approved or type-accepted before being marketed, whereas the receiver portion needed type-certification or notification (these latter two procedures requiring only the submission of an application form and, in the case of certification, copies of emission test results). This obviously required a manufacturer to obtain two different authorizations for the same piece of equipment. Since the entire equipment is submitted for type-approval of the transmitter (or submission of technical data and test results for type-acceptance), the Commission has information on the entire unit and can identify problems that may occur at a later date. Therefore they are dropping the requirement for separate authorization for the receiver portion of transceivers.

Among recent proposals, the FCC has proposed amendment of its rules to allow CW and voice modulation by ELT's and EPIRB's. ELT's (Emergency Locator Transmitters) are battery powered transmitters carried on aircraft and are activated automatically in the event of a crash. An EPIRB (Emergency Position Indicating RadioBeacon) is carried on ships and lifecraft and is activated either manually or automatically. Both transmit a swept audio tone between 300 and 1600 Hz on 121.5 and 243.0 mHz (plus 156.75 and 156.8 for certain types of EPIRB's). The FAA proposed new standards for ELT's a couple of years ago that include allowing voice modulation in addition to the swept tone. Plus, a manufacturer (ARNAV) has developed an ELT with a digitally synthesized voice that interupts the tone every three minutes and gives the aircraft tail number, the time the ELT was activated and, when interconnected with the proper navigational equipment on the airplane, the aircrafts coordinates. The FAA, the Coast Guard and the Air Force all favor amending the FCC rules to allow such operation, and to allow such use by EPIRB's also, since their function is almost identical. Such operation would be optional and would be in addition to the mandatory conventional swept tone.

The Commission has issued a Further Notice of Proposed Rulemaking that would allow the use of vacant UHF TV channels for portable Broadcast Auxiliary stations. Broadcast Auxiliary (or ENG) use is currently permitted in the 2, 6.4, 7 and 13 gHz bands. Typical use would be transmission of video (and audio) from an ENG van to the TV studio. Also, in instances where running cables from the camera to the ENG van is impractical, 2 gHz channels may be used for links from the camera to the van. These are used extensively at sporting events and the like. Under these conditions, the available channels can be intensively used, especially where TV crews from a number of stations may be present. To alleviate this congestion it is proposed to allow the use of unallocated and unassigned UHF TV channels for low power links from TV cameras. Maximum power permitted would be one watt, or four watts ERP. To preclude use of the equipment by other users (or the general public), they would only be allowed to transmit signals that are not compatible with regular televisions. Two TV channels (up to 12 mHz) could be used for FM video, if desired. Since earlier in this proceeding UHF TV channels were made available for wireless microphones and other low power uses, it is proposed to limit these uses to TV channels 23 and below, and ENG use to above 530 mHz.

In an effort to streamline the equipment authorization requirements even further, a number of additional changes are proposed to Part 15. One would eliminate the manufacturers code that is required on the FCC ID label (along with the country of origin, the grantee code and the equipment number). Since many marketers procure their equipment from a number of manufacturers in a number of countries, a new authorization must presently be obtained every time they change sources. Another change would eliminate the requirement for a new grantee code every time approved equipment is marketed under a new trade name, as long as it is electrically identical to that already approved. Also, the detailed format proscription of the FCC ID label will be relaxed, and the country of origin made optional, since

the Customs Service has more than adequate rules to determine percentage of content of foreign parts, etc., than does the FCC. Finally, the FCC wants to establish a 30 day deadline for submission of equipment samples when so requested. Manufacturers who fail to submit a sample of previously authorized equipment for testing for continued compliance could then be fined.

The Commission is proposing to amend its rules to require a showing of need from applicants for additional Public Coast station frequencies where the proposed service area overlaps his existing service area by over 70%. New applicants for the 161 mHz marine telephone frequencies need only show a public interest to apply for a channel. But an existing licensee must show sufficient usage of his present channel before he can apply for another. This is to prevent stockpiling of frequencies to keep others from applying for them. By establishing the 70% overlap rule, an applicant won't be able to circumvent the showing of need requirement by putting up a transmitter 10 miles from his other one, then claiming to be a new applicant for a different area.

INTERNATIONAL

This column is for reporting 2-way communications frequencies above 30 MHz, radio system details, monitoring experiences, and any other information relating to monitoring in countries other than the United States and Canada. Send to:

Rickey Stein, 456 Barrymore Place, North Brunswick, NJ 08902

I received a call a number of weeks back from a fellow who was a member of RCMA back when the group was starting up. His name is Ernest Kemeny and he was about to go off on a vacation to Israel and Egypt. He had decided to take along several radios and wanted to talk about possible frequencies to explore, about getting through customs and a number of other areas in which we have a common interest. We exchanged air frequencies, numerous thoughts about the trip and frequencies that I had noted from our trips there in 1974 and 1979. Well, that was a long time ago, as radio progress goes, and things change. In 1974 I only had a Lafayette 5 band portable- a tunable radio which only allowed for wild guesses when it came to frequencies. In 1979, I went with a Bearcat 250 and a crystalled Regency handheld, and while I was able to make some recordings and note a number of frequencies, the lack of a radio that would cover the European low band of 66-90MHz and not being at all fluent in the language were truly great impediments to any fantastic breakthrough in monitoring. Inspite of all this, I was able to give Ernest a list of starting frequencies, knowing full well that he would do a bang-up job, even with the same limitations. I had seen the results of some Ernest's monitoring from an earlier trip to France. I sat back, and waited the three weeks for him to return with great anticipation.

Well, I was not to be disappointed. Ernest returned with 4 or 5 pages cram-packed with frequencies and notes from Israel and Egypt and some additions to his France list. In this column, I am going to list the Egyptian frequencies. As you will note, there is almost no positive id as to use of most of the stations, since neither Ernest or his companions spoke Arabic. Some of the more obvious uses are guessed at-taxi cabs and mobile phones. Those of us who have been monitoring for a long time have realized that there is a distinctive rhythm to most of the types of services that use radios. After a while, you can pretty much determine who is doing the talking by the sound of the transmissions. And this is true whether you know the language or not. So, here is the Egyptian list including frequencies monitored on the flight from Israel to Egypt:

FREQUENCY	CITY	NOTES
118.1000	Cairo	Cairo Airport Tower
118.1000	Cairo to Tel Aviv	Tower
119.1000	Cairo	Cairo AP Approach Control
121.7000	Cairo	Cairo Airport ATIS
121.9000	Cairo	Cairo Airport Ground
121.9000	Cairo to Tel Aviv	Ground Frequency
125.3000	Cairo	Cairo Center-Low Altitude
126.6000	Cairo	Cairo Center-High Altitude
126.8000	Cairo	Cairo AP unknown use
127.3000	Cairo to Tel Aviv	Inflight reception on Air Sinai
127.7000	Cairo	Cairo Center-High Altitude
131.8500	Cairo	Cairo AP unknown use
150.1750	Cairo	Mobile Phone
152.7000	Cairo	Steady Tone
152.7800	Cairo	Steady Tone
153.1000	Cairo	Voice/Repeater
153.1500	Cairo	Mobile Phone/also heard with open carrier
153.1500	Cairo	Voice (taxi?)/Repeater
154.1500	Cairo	Voice (taxi?)/Repeater
155.7000	Cairo	Steady Tone
157.9500	Cairo	Mobile Phone
161.1000	Cairo	Voice/Tones/Repeater
162.1500	Cairo	Voice/Base-Mobile
162.7750	Cairo	Voice/Tones/Base-Mobile
163.5500	Cairo	Voice
163.6750	Cairo	Digital Tones
165.4000	Cairo	Voice/Tones/Base-Mobile
165.6500	Cairo	Voice/Tones/Base-Mobile
167.6000	Cairo	Mobile Phone
167.6000	Cairo	Voice (taxi?)/Repeater
168.0000	Cairo	Voice/Base-Mobile
168.5000	Cairo	Voice/Repeater/MODAD ID
168.8500	Cairo	Voice/Base-Mobile
168.9750	Cairo	Voice with Tones
169.0500	Cairo	Voice/Mobile Phone?/Repeater
391.7500	Cairo	Tones
399.8000	Cairo	Phone?
401.5250	Cairo	Digital Tones
410.6000	Cairo	Mobile Phone
411.2000	Cairo	Mobile Phone
411.4000	Cairo	Mobile Phone
411.6000	Cairo	Mobile Phone
411.7000	Cairo	Mobile Phone
411.9000	Cairo	Mobile Phone
412.0000	Cairo	Mobile Phone
412.1000	Cairo	Mobile Phone
412.2000	Cairo	Mobile Phone
412.3000	Cairo	Mobile Phone
412.4000	Cairo	Mobile Phone
412.5000	Cairo	Mobile Phone
412.6000	Cairo	Mobile Phone
412.7000	Cairo	Mobile Phone
412.8000	Cairo	Mobile Phone
412.9000	Cairo	Mobile Phone
413.0000	Cairo	Mobile Phone
414.3750	Cairo	Voice
418.8500	Cairo	Digital Tones
425.0250	Cairo	Voice
432.0000	Cairo	Steady Tone
436.0500	Cairo	Voice/Repeater
442.5750	Cairo	CW
454.3750	Cairo	Voice
460.3000	Cairo	Steady Tone
460.4250	Cairo	Mobile Phone-scrambled!
460.4500	Cairo	Mobile Phone/Steady Tone
461.4500	Cairo	Voice/Repeater
461.5000	Cairo	Voice/Base-Mobile
462.3500	Cairo	CW-Link Tone Pulses
462.5250	Cairo	Voice/Repeater

464.7750 Cairo Voice/Base-Mobile

MARKETPLACE

Members may advertise, free of charge, items wanted, items for sale, and items for trade that are associated with the hobby of monitor/utility radio listening. No dealer ads will be accepted for this column. RCMA assumes no responsibility for the outcome of any transactions between members resulting from ads printed in this column. Send to:

RCMA MARKETPLACE, c/o Gary Darcy, P.O. Box 1329, Palmdale, CA 93550

All Marketplace ads will be accepted ONLY on special forms available from this column's editor. Send a self-addressed STAMPED envelope (business size) to the address above for a supply of forms. Foreign members do not need to include postage on envelopes. ALL MEMBERS must include their membership numbers.

The Marketplace editor can be contacted by electronic mail via the following services:

COMPUSERVE.....76566,1542
THE SOURCE.....BDW292
DELPHI.....GMDARCY
PEOPLE/LINK....GMDARCY
GENIE.....GMDARCY
MCI MAIL.....286-1087
TELEX.....6502861087
EASYLINK.....62015327

EDITOR'S COMMENT: At present I have a transfer request pending with my employer to Salt Lake City, UT. My wife started work there six months ago. I'm still waiting. Hopefully, by the time you read this I'll be there with her. In the mean time, please continue to use the Palmdale, CA address. THANKS!!!

WANTED: Any kind of information of the availability of Yagi antennas and amplifiers for the U.S. channel A4 (67-71 Mhz).
Contact: REIJO SIIVONEN (FINL-001), Osmokatu 13, SF-26100 Rauma, Finland. (06-29-87)

FOR SALE OR TRADE: Bearcat 210. Recently pre-tuned; works well; will consider trade for Ham transceiver (10-160 meters). $100.00. Willing to pay balance for equal swap.
Contact: BILL MULLEN (NY-384), P.O. Box 529, Honetoye Falls, NY 14472-0529. (07/02/87)

FOR SALE: Realistic PRO-30. 16 channel hand-held programmable; complete with all manuals and antenna. $150.00.
Contact: J. JOSEPH RUSSO (CA-VE-017), 1979 Marco Dr., Camarillo, CA 93010 or telephone 805-482-0498. (07/06/87)

FOR SALE: Bearcat BC-250. Good condition; complete with manuals, cables & antenna; in original box. $150.00.
Contact: J. JOSEPH RUSSO (CA-VE-017), 1979 Marco Dr., Camarillo, CA 93010 or telephone 805-482-0498. (07/06/87)

FOR SALE: Bearcat BC-210. Complete with manual & built-in descrambler. $100.00.
Contact: J. JOSEPH RUSSO (CA-VE-017), 1979 Marco Dr., Camarillo, CA 93010 or telephone 805-482-0498. (07/06/87)

FOR SALE: Realistic PRO-30. Includes manual, and flexible and telescoping antennas. Excellent condition. $150.00.
Contact: TODD HEILER (NY-338), 5586 James Dr., Hamburg, NY 14075. (07/05/87)

FOR SALE: Realistic PRO-25. Includes adapter/charger, 12 crystals, flexible and telescoping antennas, manual, and batteries. $50.00.
Contact: TODD HEILER (NY-338), 5586 James Dr., Hamburg, NY 14075. (07/05/87)

WANTED: Portable microfiche reader. Must be in mint condition.
Contact: DAVE MARSHALL (OH-146), 50 Villa Rd., Springfield, OH 45503. (07/10/87)

FOR SALE OR TRADE: Bearcat BC-210-XW. $130.00 or would like to trade for an HX-1200, HX-1000, Cobra SR-10, Realistic handheld programmable, or BC-50-XL.
Contact: RICHARD AVERY (CA-AL-020), 2672 - 108th Ave., Oakland, CA 94605. (07/19/87)

FOR SALE: Radio Shack PRO-2003. Less than one year old; manual and original box. $175.00.
Contact: STEVE BATES (IA-056), 700 - 35th St. #-392, Marion, IA 52302 or telephone 319-377-0420. (07/16/87)

FOR SALE: Hamtronics 800 Mhz converter. Non-working. $30.00.
Contact: STEVE BATES (IA-056), 700 - 35th St. #-392, Marion, IA 52302 or telephone 319-377-0420. (07/16/87)

FOR SALE: J.I.L. SX-400. Excellent condition; AC adapter included. $150.00.
Contact: LEWIS S. HARVEY (GA-008), 3 Egrets Nest Dr., Savannah, GA 31406. (07/22/87)

FOR SALE: Bearcat 260. Works good; includes all equipment; set does lose its memory and manual button is hard to make contact. $50.00.
Contact: LEWIS S. HARVEY (GA-008), 3 Egrets Nest Dr., Savannah, GA 31406. (07/22/87)

FOR SALE: Regency ACT-T16K. 16 channel programmable base; includes original box and instruction book; will send by UPS prepaid. $125.00.
Contact: ED HOUCK (IA-045), 2719 Allison, Des Moines, IA 50310 or telephone 515-279-2928. (07/21/87)

FOR SALE: Regency ACT-R10 H-L-U. 10 channel crystal controlled; covers VHF Hi/Low & UHF; includes instruction book and lots of extra crystals. $50.00.
Contact: ED HOUCK (IA-045), 2719 Allison, Des Moines, IA 50310 or telephone 515-279-2928. (07/21/87)

FOR SALE: Regency HX-1500. 55 channel handheld; includes original box & instruction book. Will ship by UPS prepaid with charger; less than a year old; very good condition. $175.00.
Contact: ED HOUCK (IA-045), 2719 Allison, Des Moines, IA 50310 or telephone 515-279-2928. (07/21/87)

FOR SALE: Regency M-400. Includes original box and instructions. Will ship by UPS prepaid. $175.00.
Contact: ED HOUCK (IA-045), 2719 Allison, Des Moines, IA 50310 or telephone 515-279-2928. (07/21/87)

WANTED: Bearcat 70-XLT. Unit must be in good condition. $150.00.
Contact: E. MENCZER (NY-228), 555 Bedford Ave., Brooklyn, NY 11211. (07/29/87)

FOR SALE: Realistic PRO-2021. 200 channels; 7 months old; 5 year extended warranty; I do not need 200 channels. $250.00.
Contact: ARTHUR FORREST (LA-048), 2203 Wakefield Ave., Bossier, LA 71111-3435 or telephone 318-746-3793. (07/30/87)

MONITORING & THE LAW

Send information or questions to:
Roger W. West (MN-052), P.O. Box 366, Wyoming, MN 55092

Hello! This month's column is being written from Clear Lake, Wisconsin. We are visiting my Daughter, Son-in-law and Grandson, Joey. I have heard the saying "God's Country", well if there is such a place, I think I have found it. This month I will be reviewing pending legislation in reference to "The Labeling of Communication Scanner Devices (Docket No. RM 5836)"

Regency Electronics through its attorneys, petitions the Federal Communications Commission to adopt a rule requiring the labeling of consumer communication scanner devices ("scanners"). It urges the Commission to adopt a requirement that specifies that each scanner which is sold must be accompanied by a statement that:

> Improper use of this device may violate the provisions of the Electronics Communications Privacy Act of 1986 through the intentional unauthorized interception of protected radio communications.

The purpose of this rule is to help educate the public that certain uses of these devices could be illegal in light of passage of the Electronic Communications Privacy Act of 1986. In support of this petition, the following is provided:

Regency Electronics, headquartered in Indianapolis, Indiana, is a major manufacturer of consumer scanners. Scanners are among the newest of consumer electronic devices. They are radio receivers that can receive a broad range of communication services. In much the same way that a traditional radio receiver receives AM and FM radio transmissions, scanners receive these transmissions as well as VHF and UHF tv audio, marine, public service, aircraft, amateur and civil defense transmissions on thousands of frequencies. Many scanners are capable of receiving a wide range of frequencies from 25 MHz to 2.0 GHz. Today, scanners assist reporters in covering the news and rescue crews in handling emergencies. They provide an audio window-on-the-world for hundreds of thousands of Americans who own them.

Up until passage of the Electronics Communications Privacy Act, communications privacy was protected primarily through the enforcement of two statutes. Section 705 of the Communications Act of 1934, 47 U.S.C.A.§705, and its predecessor 47 U.S.C.A. §605, generally prohibited the "interception and use" or "reception and divulgence" of non-broadcast or public communications. Mere passive monitoring, without more, was not prohibited.

Title III of the Omnibus Crime Control and Safe Streets Act of 1968 prohibited willful monitoring of telephone communications, but at least part of the telephone communication had to be transmitted by wire. It was unclear whether that statute applied to modern technological developments such as computer-to-computer communications, electronic mail and cellular telephone communications. Passage of the Electronics Communications Privacy Act was intended to clarify the uncertainties brought on by technological advancement. Recognizing the passage of the Electronics Communications privacy Act brought a new standard of privacy to many previously accessible radio services, the Congress urged that informative labels be required by the Commission for cellular, scanning and satellite video equipment.

With the passage of the Electronics Communications Privacy Act, mere intentional passive reception of certain communications could be a crime. Because scanners are capable of receiving multiple sources of communications channels, Regency is concerned that consumers be fully apprised of the legal ramifications of the device's use.

Scanners are used to monitor many communication services such as marine, aeronautical, civil defense and government communications, amateur and CB or general mobile radio service transmissions as well as other services which relate to ships, aircraft vehicles or persons in distress. These communications are readily accessible to the general public. Monitoring of these frequencies is legal under the Electronics Communications Privacy Act as is monitoring of that part of cordless telephone communications linking the hand-set and the base unit. However, scanners are also capable of monitoring radio communications services which are not readily accessible to the public (as that term is defined in great detail in the legislation). These services include unscrambled or unencrypted communications which are provided over a communications system by a common carrier or transmissions of remote broadcast stations, television and radio broadcast auxiliary services or private fixed microwave services. Intentional monitoring of those frequencies could be a crime under the Electronics Communications Privacy Act. intentional monitoring of cellular telephone calls which can be received on some scanners, as well as virtually all television sets manufactured prior to 1982, could also be a crime.

Regency wishes to fully inform consumers concerning this new law. It believes that a simply accurate disclosure statement will help to fully apprise members of the public of their respective rights and liabilities with respect to the use of scanners. It may help to avoid the possibility that a consumer could be held liable or criminally prosecuted for the use of a scanning device.

At the time the legislation was passed, Congress took several actions which were intended to safeguard the consumer from potential misuse of the law. For example, it sought to make clear that the inadvertent reception of protected communications was not a crime by increasing the state of mind required to find a violation from "willful" to "intentional". This action was taken at the request of the scanner industry. Congress also urged the Commission to consider adopting a labeling requirement for scanners. The Senate report which accompanies the passage of the Electronics Communications Privacy Act provides:

> It has been suggested that the Federal Communications Commission consider labeling requirements on . . . scanning equipment . . . the Commission might consider the feasibility of . . . requiring that scanning equipment be labeled to indicate that the intentional interception of protected communications could be a federal criminal violation.

Requiring the labeling of scanners is consistent with the policies which the Commission has adopted in similar situations. For example, the Commission, faced with the fact that cordless telephone communications could be, and were being, readily intercepted by several different means required that a warning be placed on such devices indicating that calls made on these phones might not be private. As a result, consumers were made aware of the fact that their unscrambled transmissions were subject to third party monitoring. Armed with this information, they were also able to choose whether or not to employ the devices and whether or not to seek some means for securing these transmissions. This disclosure requirement has helped the marketplace to develop adequate privacy technology.

Also, prior to 1984, the legality of home viewing of some satellite cable programming was unclear. In order that the users of home satellite receivers were fully apprised of these facts, the Commission included a statement on the certifications for these devices to the effect that use of them to intercept and use certain transmissions might be a violation of Section 605 of the Act. This too, worked well by apprising members of the public of the state of the law. The Commission routinely requires that computing and other communication devices be marketed with public disclosure information. Regency also notes that the Commission is currently studying a proposal filed by the Washington Legal Foundation to require the disclosure that unscrambled cellular telephone devices are subject to third party monitoring.

The Commission's prior warning and labeling requirements have been a success. The labels put consumers on notice about the law and the technical limitations of the equipment they are using. Those users of cordless telephone communications facilities, for example, who require greater security are able to purchase phones equiped with transmitters that provide it. More and more sophisticated devices are entering the marketplace as a result. The Commission's computer labeling requirements have reduced the number of interference complaints registered by fairly apprising the purchaser of his or her rights at the time of purchase. Requiring notice on the equipment that certain uses of scanners may be illegal will also add to the consumers knowledge. As was the case with the cordless telephone labeling requirement, a scanner labeling requirement may help to spur the growth in protection devices for those who want protection. Already, for example, there are devices on the market for cellular telephones for as little as $195.00, which prevent cellular communications facilites, for example, from being monitored by scanners. Manufacturers are also developing microchips at a cost of as little as $7.00 which can be implanted in the cellular phones and can scramble the signals of cellular telephones. These benefits are fostered by a public disclosure requirement fairly informing consumers concerning the uses of the equipment in question. Regency urges the Commission to adopt a similar requirement for scanners.

In passing the Electronics Communications Privacy Act, Congress made it clear that it did not intend to limit the manufacture of scanning devices. Similarly, Regency does not believe that Congress intended the alteration of scanning equipment to preclude from unauthorized interception. Nevertheless, Regency has examined the ramifications of such an approach. First, frequencies which may be entitled to privacy protection are entitled to protection only under certain circumstances. Deletion of the "protected" frequencies would eliminate the availability of scanners capable of receiving the "protected" frequencies for permissable purposes as defined under the Electronics Communications Privacy Act. Further, it does not believe that such a solution is practical at the present time for several reasons. There are well over 1,000 frequencies which may be entitled to protection and they are literally

RCMA LISTENER'S PROFILE

This centerfold page can be removed from the NEWSLETTER without damage to the magazine. Once you have noted the frequencies which PROFILE your listening area, remove this centerfold page and mail to:

LISTENERS' PROFILE

Joe Lewis, 750 Scotland St, Dunedin, FL 34698

In listing the best general frequencies for your listening area, you will give other RCMA members who might be visiting or just passing through your area a "general listening guide", based on what YOU, the resident, have in your scanner memory. Of course, we don't all have the same interests, so make your listing as general as possible. There is an excellent sample listing on page 80 of the March edition of the NEWSLETTER. Also, there is a sample listing for the Palm Beach, Ft. Lauderdale area by Bill Mauldin on page 4 of this form. Make any notes that you would like which will help Joe give your listening area a better LISTENER PROFILE.

MY LISTENING AREA IS: _____

FREQUENCY	USAGE
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____
6. _____	_____

7. _____ _____

8. _____ _____

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29. _____ _____

30. _____ _____

31. _____ _____

32. _____ _____

33. _____ _____

34. _____ _____

ADDITIONAL INSTRUCTIONS

Use the extra space around the edge of this form for any notes that you might want to add about your listening profile. Should your information be devoted just to one servive, say public safety, for example, you may wish to mail your form to your favorite Public Safety Editor. If this is the case, by all means, do so.

LISTENER PROFILE FOR SOUTH FLORIDA

1. 154.665 MHz	F1, Florida Highway Patrol (Miami North)
2. 154.680 MHz	F2, Florida Highway Patrol (Ft. Lauderdale)
3. 154.695 MHz	F3, Florida Highway Patrol (Miami South, Palm Beach)
4. 154.920 MHz	F4, Florida Highway Patrol (Aircraft, Simplex)
5. 453.575 MHz	Florida Highway Patrol, Turnpike Troop (Aircraft)
6. 453.625 MHz	Florida Highway Patrol, Turnpike Troop
7. 161.100 MHz	Seaboard Railroad (CSX) Amtrak Road Channel
8. 160.530 MHz	Florida East Coast RR, dispatcher to train
9. 160.650 MHz	Florida East Coast RR, train to dispatcher
10. 154.355 MHz	Palm Beach County Fire Dispatch Repeater
11. 154.250 MHz	Broward County County Fire Dispatcher
12. 453.700 MHz	Metro Dade Fire Dispatcher (North County)
13. 453.800 MHz	Metro Dade Fire Dispatcher (South County)
14. 156.800 MHz	Marine Emergency & Calling
15. 157.100 MHz	U.S. Coast Guard Channel 22 Marine Bulletins
16. 151.385 MHz	Florida Fish and Game, Base Channel
17. 155.700 MHz	Dade County Public Safety, Airport Area
18. 155.985 MHz	Dade County Public Safety, Command & Marine
19. 155.220 MHz	Dade County Randle Ambulance Service
20. 155.370 MHz	Statewide Police Emergency & Intercity Channel
21. 154.710 MHz	Broward County Sheriff, Dist. 1 & Special Units
22. 154.785 MHz	Palm Beach Sheriff, Central Area Dispatch
23. 45.060 MHz	Highway Patrol low band base system
24. 130.250 MHz (AM)	AIRINC Airline System company communications
25. 131.170 MHz (AM)	AIRINC Airline System company communications
26. 130.870 MHz (AM)	Eastern Airlines "Atlanta" - serving many airlines
27. 122.000 MHz (AM)	FAA Flight Watch Weather for enroute aircraft
28. 471.1125 MHz	Broward County EMS Dispatch
29. 172.300 MHz	Miami Coast Guard
30. 157.175 MHz	Coast Guard Auxiliary
31. 156.650 MHz	Coast Guard Bridges and Navigational Channel
32. 172.275 MHz	National Park Service Link to Florida State Agencies
33. 170.150 MHz	Dade County Emergency Media Notification Channel
34. 173.225 MHz	Miami Herald, dispatch for news reporters

You need not furnish any additional information about yourself or your equipment. All that is needed is just a suggested listening list for your area. This profile will be helpful to others. The above listing is correct and up to date for South Florida. What is current and up to date for your area?

scattered thoughout the spectrum from 35 MHz to 960 MHz. Included are frequencies allocated notin blocks, but separated by frequencies the reception of which is legal. In some cases frequencies are shared between services which are legal to monitor and those which may be protected. In other cases different frequencies which may be entitled to protection are assigned to different cities and services. Finally, the specific frequencies that are in fact "protected" are subject to constant change. Designing a receiver to block out frequencies under these circumstances would be prohibitively expensive and may in fact be impossible.

CONCLUSION

The first decade of the last quarter of the 20th century has already witnessed dramatic communications technological advancement. This advancement has inured to the benefit of the consumer through the development of many new devices which expand the consumers' horizons by increasing his or her access to new and current information and ideas. A scanner is one such device.

With this expansion in technology has come a legitimate concern with the privacy rights of the individual. To protect these rights the Congress adopted the Electronics Communications Privacy Act. The Electronics Communications Privacy Act has changed the previous standard for intentional interception of certain unencrypted radio transmissions and it provides stringent criminal and civil liability for violation of these new standards. Thus Congress has recommended that the Commission explore the feasibility of adopting a labeling requirement for scanners.

Regency believes that such a requirement, designed to fully apprise consumers that monitoring some unscrambled communications services may violate the law, would serve the public interest. By requiring the inclusion of language such as that suggested, the Commission will help to increase the public awareness of the legalities in this area. Such a labeling requirement strikes an equitable and effective balance between freedom of the consumer to access the airways, which is critical for our society, and the legitimate desire of the individual for privacy of communications.

EDITORIAL: I am for this legislation, for two reasons.
(1.) It will serve as a reminder to us what is not legal to monitor.
(2.) It also shows the different agencies that are against monitoring, that we who monitor are responsible people.

CLOSING: Don't forget to answer the questions that I asked in the September newsletter.

FOOD FOR THOUGHT: You know you live in a small town when the phone rings and it is a wrong number, but you still talk for 15 minutes.

[EDITOR'S NOTE:] I am not a lawyer, so please do not take my opinion as a legal statement.

Good listening!

Roger West

NEW PRODUCT REVIEW

This column is for reports on new products of interest to scanner listeners. Send reports on scanners, antennas, frequency publications and other products related to the hobby to:

James A. Abdu (GA-058), 1203 N. Crossing Way, Decatur, GA 30033

Hello, and welcome to the New Product Review column. This month I have information about a new 200 channel with 800MHz capabilities from Uniden and reviews of the Regency Informant, a hand held frequency counter from OPTOelectronics and The 'Official' New Hampshire Frequency Directory.

I received some anonymous information in the mail about the BC 200XLT scanner from Uniden. This new hand held has 200 channels in ten banks of 20 channels each and frequency coverage of 29-54MHz, 118-174MHz, 406-512MHz and 806-956MHz. This is the second hand held to offer 800MHz capabilities and the first to have 800MHz as well as scanning banks and many memory channels. This unit may be the `one

many of us have been waiting for, it will be interesting to find out how the unit actually performs.

The BC 200XLT offers 10 priority channels (the first channel of each bank), programmable 3 second delay on any channel, channel lockout, illuminated Liquid Crystal Display (LCD), snap on battery pack (6-AA), direct channel access and includes a leather carrying case.The unit also has a weather search button which provides one button tuning of the national weather service broadcast. There is only one scan rate, 15 channels per second, which is certainly slow when scanning a large number of frequencies but adequate for most listening. I am very anxious to test this unit and hear from members who have used or bought this new unit. It may be available in the Fall (maybe as this is being read!).
Thanks to the sender of this information.

The Regency Informant scanner has been on the market for a few months now, I haven´t received any mail on this unit yet but have had a chance to try one. This unit is a scanner for those who drive alot and want the benefits of scanning without having to obtain and program frequencies for each state. The Informant is pre-programmed with state and local police frequencies for each state in the country. Once you step through and set the state you want all you do is choose `highway´ or `city´ and the unit will scan all the pre-programmed frequencies for that state at a " Turbo-scan" rate of 40 channels per second.

The concept of the Informant is certainly interesting and somewhat unique, it is easy to use and powerful for the right type of user such as truckers and other travelers. Using the unit takes about 5 minutes to read the manual and choose the state and your all set. Local and state police can be heard easily and readily without frequency guides or any programming. The reception is fine and the audio is loud.

The unit really does function well and does what it is supposed to do. I´m sure this is fine for many users, but for enthusiast (like many of us) there are some things to be desired. It would be nice to know what frequencies are pre-programmed at least for reference, although a display would be nice also. About the only problem I found in using the Informant is that a pre-programmed frequency that has an open microphone, open carrier, or frequent paging will cause the unit to stay on that frequency most or all of the time. There is no way to temporarily (or permanently) lockout a channel.

I would recommend this unit for anyone who travels alot and doesn´t want to mess around with directories or programming a scanner. I don´t think the Informant was designed for scanner enthusiast but for those desiring road, traffic and radar information while driving.

I just received information about more advanced and refined models of the Informant line and will report on these in the next column.

OPTOelectronics, a company based in Florida has introduced two new hand held frequency counters, models 1200H and 1300H. The coverage of these units are 1-1200MHz and 1-1300MHz respectively. These units are identical except for the range. They measure 3.9" x 3.5" x 1" and are complete with built in Ni-Cad batteries. The display is 8 digits of .28" height will leading zeros blanked. The units have four switches: power, sensitivity, range, and gate.

The sensitivity (norm or high) switch will allow the counter to be more effective in metro areas by reducing interference. High sensitivity will display random numbers which can usually be eliminated by switching to norm. Range (1-500MHz or 500-1300MHz) helps the unit to be more sensitive for that range although the units will still register strong frequencies in the other range.
The gate switch (fast or slow) controls the sample time and the rate at which the display will change. Fast is a .25 second sample time with 1000Hz resolution, slow is a 2.5 second sample time with 100Hz resolution.

The counters are fun to use as a hobbyist but are really advanced troubleshooting and testing tools. They will function the same as units many times their size and weight. With the optional test probe, the unit can measure frequencies on printed circuit boards and other circuits. With the antenna probe, the unit will

register the frequency used by a near by transmitter. It's this function I found intriguing, to help identify unknown frequencies.

In operation the counters work well in areas with little interference. In areas with many frequencies in use it is not as effective. The counters will pick up a 5 watt hand held (marine radio in one test) from about 15 or 20 feet. Police cruisers and hand held units can be picked up with out much problem if you can get close (discreetly, of course!). Cordless and cellular phones don't put out enough power to register unless you are very close to the antenna (in my tests). The units can also be used to calibrate and verify output frequencies of all types of transmitters.

The OPTOelectronics counters are a very useful and compact tool and also helpful in identifying output frequencies. The prices are reasonable ($99.95 - $150.00) with the units available in kit form or assembled and tested. A pre-amp probe may be also introduced. For more information contact:

OPTOelectronics
5821 N.E. 14th Ave.
Ft. Lauderdale, Fl 33334
1-(800)-327-5912

The "Official" New Hampshire Scanner Guide appears to be a very comprehensive and well put together directory of frequencies for the state. It is complete with commonly used codes, maps, call signs, etc... The Guide includes state and local police, fire, businesses, mobile phones, weather service, medical and other frequencies of interest. There are three main sections: general information, listings by community, and listings by frequency. The guide covers the 800MHz regions as well as the 'usual' ranges, trunked systems are also indicated as such.

I am very impressed with this directory but can't comment on the validity of the information contained. It's hard to pick up New Hampshire from here in Atlanta. I'll surely take it with me next time I head that way.

The Guide is edited by Robert A. Coburn and it is obvious that much time and effort was dedicated in this publication. I would certainly recommend this Guide to those living or traveling through the Granite State. For more information contact:

New Hampshire Scanner Guide
P.O. Box 712
Londonderry, N.H. 03053

Unfortunately the R.C.M.A. is not mentioned in the guide, maybe the next edition will mention us !

That's All For Now,

Jim Abdu

RCMA has a Telephone Number

The new RCMA telephone number is (714)545-9551. It's 'manned' by an answering machine, and while it's been established for RCMA members, its use is limited. You may leave a message concerning delivery or renewal problems; you cannot use it to request club information or order back issues. Appropriate response will be made by letter or postcard, not by telephone. Any call regarding a membership problem MUST be accompanied by your membership number.

Please remember that it is a toll call, so be sure before you dial that a written communication won't do just as well.

NEWS MEDIA COMMUNICATIONS

This column is for reporting frequency and radio systems information of news media. Send related reports and questions on newspaper, radio, television, magazine, film production companies, etc. to:

Allen G. Henney, MD-069, 6912 Prince Georges Ave, Takoma Park, MD 20912

THIS MONTH WE HAVE A NICE ASSORTMENT FROM ALL OVER. FIRST, A VERY SPECIAL THANK YOU GOES TO JOHN HODAL (OUR COMPUTER CORNER EDITOR) FOR ALL HIS HELP IN CONVERTING MY COMMODORE 64 NEWS MEDIA & FREQUENCY FILES OVER TO THE IBM FORMAT. HE HAS SAVED ME MANY MONTHS OF WORK RETYPING EVERYTHING! THANKS AGAIN JOHN.

FROM A FAITHFUL CONTRIBUTOR, CARL J. GEROSA III (NY-117), WE HAVE A LOVELY NEWS MEDIA FREQUENCY LISTING FOR THE NEW YORK CITY AREA! CARL DID A REAL FINE JOB WITH THIS LISTING. HE DID SUCH A GREAT JOB TYPING IT ALSO. I ASKED CARL IF WNBC-AM HAS REPLACED ITS TRAFFIC HELICOPTER, WHICH TRAGICALLY CRASHED LAST YEAR. CARL TELLS US THAT WNBC-AM IS PRESENTLY USING SHADOW TRAFFIC & HAS NOT REPLACED THE HELICOPTER AS OF YET.

NEW YORK CITY AREA

Freq.	User/Area/Use/Call
161.64	Capital Cities Comms.-New Haven, CT WTNH-TV Kte-766 News Disp./Reporters VIP Bdc.-Westchester WVIP-FM Kto-783
161.67	FOX TV-NYC WNYW-TV "North East Bureau" Assignment Desk/Minicams Kji-334/Kek-396 NBC-NYC WNBC-TV "Local Desk" Kek-"322 Operations"/Couriers WPAT Radio-Paterson, NJ Krh-522-3
161.7	CT Bdc.-Bridgeport/Stratford, CT WICC-AM Ktb-788 WICC-AM "Airmobile" Traffic Plane Kd-8940
161.73	CBS-NYC WCBS-TV Local ENG Crews/Assignment Desk Hanson Comms.-Norwalk, CT WNLK-AM F-1 Beach Reports Kkn-780/Kf-5732 NBC-NYC WNBC-TV Kek-322/Kxh-803 WHWH "Skyway Patrol"-Princeton, NJ
450.05	CBS-NYC WCBS-TV Local Assignment Desk/ENG Crews
450.0875	CBS-NYC WCBS-AM "News Chopper" Traffic Helicopter/Reporters Kei-434
450.1875	FOX TV-NYC WNYW-TV F-1 Assignment Desk Kos-"389"
450.25	Capital Cities Comms./ABC-NYC WABC-TV RKO General-Secaucus, NJ WOR-AM News Desk/Production Crews
450.2875	CBS-NYC WCBS-TV Audio Simulcast/Cueing Keh-240
450.3875	NBC-NYC WNBC-TV F-1 Local ENG "L Control"/Mini cam crews
450.45	Westinghouse Bdc.-NYC WINS-AM F-1 Reporters
450.4875	RKO General-Secaucus, NJ WOR-TV F-1 News/Production "Control Room" Kos-404
450.5125	CBS-NYC WCBS-TV Network Couriers
450.6125	Capital Cities Comms./ABC-NYC WABC-TV NJ ENG Crews Keh-"413"
450.65	Hudson Westchester Radio-White Plains WFAS-AM Kfj-908 -"Skywatch" Traffic Plane
455.05	Capital Cities Comms/ABC-NYC WABC-TV Local ENG Crews/Assignment Desk
455.0875	Capital Cities Comms/ABC-NYC Network F-1 ENG Crews/Courier backup Kqa-992
455.15	NBC-NYC WNBC-TV
455.5125	Capital Cities Comms./ABC-NYC WABC-TV NJ ENG Crews
455.55	NBC-NYC WNBC-AM "N-Copter" Traffic Reports WNBC-TV Local ENG Crews

455.5875 Capital Cities Comms./ABC-NYC Network F-2 Couriers/ENG
WABC-TV Local Couriers Kqa-993

455.6125 Capital Cities Comms./ABC-NYC WABC-TV Local ENG Crews "RF Control"/Live Shots

Press

Freq.	User/Area/Call
452.975	Shadow Traffic Network-NYC "Metro Base"
	-West Orange, NJ "Suburban Base"
453.	Gannett-Westchester Rockland Newspapers-Valhalla "Photo Base" Wso-290
	Newsday-NYC
	New York Post Newspaper-NYC

NEXT FROM ROGER W. WEST (MN-052) WE HAVE A MEDIA PROFILE FOR WYOMING, MINNESOTA & AREA. ROGER SURE DID A NICE JOB LOCATING ALL THESE MEDIA FREQUENCIES & DOCUMENTING THEM! HERE IS HIS LISTING.

SAINT PAUL-MINNEAPOLIS, MINNESOTA & Eau CLAIRE, WISCONSIN

151.655 ST. PAUL DISPATCH/PIONEER PRESS - ST. PAUL
157.740 MINNEAPOLIS STAR & TRIBUNE - MINNEAPOLIS
161.640 HUBBARD B/C CO. (KSTP-TV5) - MINNEAPOLIS/ST. PAUL
166.250 HUBBARD B/C CO. (KSTP-TV5) - MINNEAPOLIS/ST. PAUL
170.150 WCCO (TV4) - MINNEAPOLIS
170.150 WEAU, INC (TV13) - Eau CLAIRE, WISCONSIN
450.3875 METRO TRAFFIC CONTROL - ST. PAUL
455.050 & 455.150 MINNESOTA PUBLIC RADIO - ST. PAUL
455.850 KARE (TV) - MINNEAPOLIS
461.950 Eau CLAIRE PRESS - Eau CLAIRE, WISCONSIN
463.875 WAYL (FM93.7) REMOTES - WEST ST. PAUL

BOISE, IDAHO

ANOTHER FAITHFUL CONTRIBUTOR, GEORGE WIGHT (CA-TO-001) WRITES TO TELL US ABOUT A TRIP HE TOOK TO IDAHO BACK IN APRIL-MAY 1987. GEORGE TAKES HIS REGENCY HX-1200 WITH HIM WHEN HE IS ON THE ROAD. WHILE IN BOISE, IDAHO GEORGE RECEIVED THE IDAHO STATESMAN (NEWSPAPER COMPANY) ON 457.975 MHz. THE BASE CALL SIGN WAS WBC241. HE HEARD THE MOBILE UNITS ON THE ROUTE THEY HAVE FOR THE PAPER STOP'S (LIKE THE: STORE, HOME etc...). NO REPORTERS WERE MONITORED, JUST PAPER SERVICE. THANKS GEORGE FOR THE UPDATE!

AND NOW, FROM FRED DROST (CT-034) WE COVER ONE OF MY FAVORITE MEDIA TOPICS... TRAFFIC. SEVERAL MONTHS AGO FRED ASKED IN THIS COLUMN IF ANYONE KNEW OF THE FREQUENCY FOR THE WTNH (TV8) TRAFFICNET HELICOPTER TRAFFIC WATCH SYSTEM WHICH IS BASED IN NEW HAVEN, CT. WELL, I RECEIVED ANOTHER VERY NICE LETTER FROM FRED (& A LISTENER'S PROFILE FORWARDED TO ME FROM GARY SAFFER, PSNE EDITOR ALSO FROM FRED). FRED WAS SO NICE TO KEEP US UP TO DATE ON THE TRAFFIC FREQUENCIES FOR HIS AREA. HERE IS FRED'S TRAFFIC UPDATES.

CONNECTICUT

450.8625 WTNH (TV8) TRAFFICNET HELICOPTER TRAFFIC WATCH SYSTEM
WTNH GIVES STATEWIDE TRAFFIC REPORTS, DURING BOTH MORNING & EVENING RUSH HOUR. 450.8625 IS ALSO USED TO SYNDICATE REPORTS TO MANY BROADCAST STATIONS.

161.670 WTNH (TV8) A CORRECTION! FRED HAS NEVER HEARD REPORTERS ON HERE. THEY CAN BE FOUND ON 161.64 & 450.45 (CHOPPER 8 TOO.), BOTH ARE USUALLY QUITE BUSY.

450.650 FROM ONE OF FRED'S FRIENDS WE LEARN THAT SCOTT WILLIS (WHO IS FOUND ON WTNH (TV8) TRAFFICNET) IS ALSO DOING REMOTES FOR WAVZ "AIRWAVE 13". HOWEVER, FRED NOTES HE HAS NOT HEARD IT AS OF YET.

450.750 "RADIO 104" (MAYBE WIOF FM104.1) HAS TRAFFIC REMOTES.

450.25/455.25 AAA HARTFORD, CT AREA REMOTES TO LOCAL STATIONS. THE AAA ALSO OPERATES ITS TOW TRUCKS ON 150.92 IN THE NEW HAVEN AREA & ON 150.905/150.935 IN OTHER SOUTHERN CT AREAS.

FROM ROBERT McCONNELL, JR (MA-064) (FORWARDED BY GARY SAFFER PSNE) WE HAVE THESE FREQUENCIES FOR THE GREATER BOSTON, MA. AREA MEDIA.

GREATER BOSTON, MA AREA

450.150	WHDH (AM850)	HELICOPTER TRAFFIC REMOTES
450.650	WBZ (AM1030)	HELICOPTER TRAFFIC REMOTES
455.850	WEEI (AM590)	HELICOPTER TRAFFIC REMOTES
452.975	BOSTON HERALD	
453.000	BOSTON GLOBE	

THANKS ROBERT FOR YOUR LISTENER'S PROFILE. FINALLY THIS MONTH WE HAVE A CONFIRMED CHANNEL & FREQUENCY LIST FOR THE NEW 800 MHz RADIOS THAT THE MILWAUKEE JOURNAL/SENTINAL HAS IN OPERATION WHICH COME FROM DANIEL GRIMM (WI-030). AS MANY MEDIA BUFFS KNOW THE NEWSPAPER REPORTERS CAN OFTEN BE MORE INFORMATIVE THAT THE TV OR RADIO REPORTERS. ITS ALWAYS NICE TO HAVE THE COMPLETE CHANNEL & FREQUENCY SET-UP FOR SOMETHING LIKE THIS.

MILWAUKEE JOURNAL/SENTINAL NEW 800 MHz RADIO

CHANNEL 1	865.5875
CHANNEL 2	864.6875
CHANNEL 3	863.7875
CHANNEL 4	862.8875
CHANNEL 5	861.9875

THANKS DANIEL FOR YOUR EXCELLENT CONTRIBUTION. WELL THAT ABOUT DOES IT FOR THIS MONTH. ONE LAST NOTE BEFORE I GO, THOSE OF YOU THAT LIVE IN AN AREA THAT HAS ADDRESSABLE JERROLD CABLE TV CONVERTERS IN USE, MIGHT HAVE STUMBLED ACROSS AN FM BROADCAST BAND FREQUENCY 106.5 MHz. THIS HAS A CONSTANT DATA CARRIER WHICH TRANSMITS A SIGNAL TO THE ADDRESSABLE CONVERTERS ALLOWING AUTHORIZATION TO VARIOUS TIER & PREMIUM CHANNELS. IN MANY AREAS THIS CAN BE RECEIVED ON A FM RADIO NOT ATTACHED TO CABLE. ANYONE INTERESTED IN A LISTING OF CABLE TV FREQUENCIES, PLEASE FEEL FREE TO WRITE ME.

UNTIL NEXT MONTH...

TWO PUBLICATIONS OF INTEREST OF CALIFORNIA SCANNER OWNERS.
J. R. CLARK CAOR078

"1987 Abridged California PENAL CODE " Quick-Code Publications P.O. Box 538, San Juan Capistrano, CA 92693-0538. $6.95 list.

This publication will give you a brief discription of each of the codes you hear on the police frequencies (eg 587 - Railroads Damage/Obstruct Etc"). The publication is 4-1/2" x 8-1/2" 66 pages. I keep mine by my night stand for those 2AM calls where the code is more interesting than the action.

Quick-Code also publishes an "Abridge California VEHICLE CODE"

"GOVERNMENT RADIO SYSTEMS City, County, State, Federal, Calilfornia -- Fourth Edition" Mobile Radio Resources, 2661 Carol Drive, San Jose, CA 95125 $20.00 list.

This publication by RCMA member Robert Kelty is 256 pages of packed information pertaining to all government radios systems in California. The data is organized by county for local activity followed by state and then federal. Many 800 MHz frequencies are given. In several cases the CTSS frequencies are given which enables those lucky scanner owners with decode capability the ability to choose which of two signals to pick up. The Federal Forest Service breakdown is well organized and handy during the fire seasons. CHP well described in two pages. All in all this is great publication even though it does cover a few areas we do not discuss in this newsletter.

PUBLIC SAFETY

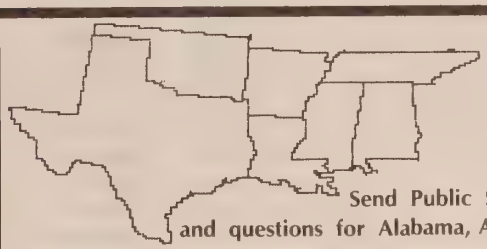
This column is for reporting Public Safety and Special Emergency frequency information, radio system details, radio codes, dispatch areas, unit numbering systems, etc. for poilice, sheriff, fire, forestry (except USFS), fish and game, highway patrol, state police, prisons, prisoner work camps, local government, highway & street maintenance, port authority/bridge maintenance, animal control, ambulances, paramedics, hospitals, life guards, ski patrol, search & rescue, flood control, civil defense and disaster organizations. Input and questions for this column must be sent to the proper regional Public Safety editor listed below.

Associated Public-Safety Communications Officers, Inc.

OFFICIAL TEN SIGNAL LIST

APCO states the numbering, sequence, words or word phrasing of the below listed signals may no be altered, nor may the reserved signals be otherwise implemented except by APCO. Any user may employ signal numbers upward, beginning with 10-40, as needed for local dispatching. RCMA publishes this listing in support of APCO and their uniform dispatch code efforts. We will print other dispatch codes, different from the OFFICIAL APCO listing, only to assist our membership in their continued monitoring hobby. It is hoped you find this listing useful.

10-1	Signal weak	10-19	(In) contact
10-2	Signal good	10-20	Location
10-3	Stop transmitting	10-21	Call ( ) by phone
10-4	Affirmative (OK)	10-22	Disregard
10-5	Relay (to)	10-23	Arrived at scene
10-6	Busy	10-24	Assignment completed
10-7	Out of service	10-25	Report to (Meet)
10-8	In service	10-26	Estimated time of arrival
10-9	Say again	10-27	License/Permit Information
10-10	Negative	10-28	Ownership Information
10-11	( ) on duty	10-29	Records check
10-12	Stand by (stop)	10-30	Danger/Caution
10-13	Existing conditions	10-31	Pick up
10-14	Message/Information	10-32	( ) units needed (Specify)
10-15	Message delivered	10-33	Help me quick
10-16	Reply to message	10-34	Time
10-17	Enroute	10-35 through 10-39 are reserved for future assignment by APCO. User option 10-40 upward.	
10-18	Urgent		



PUBLIC SAFETY - SOUTH CENTRAL

Send Public Safety and Special Emergency frequencies, radio system details, and questions for Alabama, Arkansas, Louisiana, Mississippi, Tennessee, Oklahoma, and Texas to

Ed Lentz, 609 Yorkshire, Pasadena, TX 77503-1450

GEnie - ELENTZ DELPHI - THISARSE COMPUSERVE - 72645,172

Hello again. This month I will be taking a short cut and using a complete frequency listing that was sent in by Paul (OK-039). There are several reasons why I am doing this. One, I am leaving on vacation in a couple of days. (By the time you read this it will only be a memory.) Two, I wanted to check out how the database listing will be accepted by members. Three, I am running short of time! Enuf said?

I have retyped the frequency listing as I usually do from most members contributions. This time, I put them into a database. I have added some things and hopefully this listing will be close to right. If you find any errors, they most likely are mine and both Paul and I would appreciate any corrections. Also, if you have anything to add to the list from the State of Oklahoma it would be appreciated if you could send that in also.

STATE	COUNTY.....	CITY.....	DEPARTMENT/AGENCY.....	USED FOR/BY.....	CH	RPT.OUT	RPT. IN	CALL SIGN
‡‡ STATE OF: OK								
OK	CANADIAN	COUNTY	SHERIFF OFFICE			159.1500	0.0000	
OK	CANADIAN	EL RENO	FIRE DEPARTMENT	MUTUAL AID		154.1300	0.0000	
OK	CANADIAN	EL RENO	POLICE DEPARTMENT	POLICE		460.3000	465.3000	

OK	CANADIAN	MUSTANG	FIRE DEPARTMENT	DISPATCH		154.2800	[illegible]	
OK	CANADIAN	MUSTANG	POLICE DEPARTMENT	POLICE		37.1600	[illegible]	
OK	CANADIAN	YUKON	FIRE DEPARTMENT	UNKNOWN		154.1300	0.0000	WRG587
OK	CANADIAN	YUKON	FIRE DEPARTMENT	DISPATCH		154.3250	0.0000	WRG587
OK	CANADIAN	YUKON	POLICE DEPARTMENT	PRIMARY		155.5650	0.0000	KKY344
OK	CANADIAN	YUKON	POLICE DEPARTMENT	SECONDARY		155.7600	0.0000	KKY344
OK	CANADIAN	YUKON	TERRITORY POLICE			37.1000	[illegible]	
OK	CANADIAN	YUKON	TERRITORY POLICE			37.2200	[illegible]	
OK	CLEVELAND	COUNTY	SHERIFF OFFICE	SECONDARY		155.7000	0.0000	KKC981
OK	CLEVELAND	MOORE	FIRE DEPARTMENT	UNKNOWN		154.1300	0.0000	KWL419
OK	CLEVELAND	MOORE	FIRE DEPARTMENT	DISPATCH		154.3550	0.0000	KWL418
OK	CLEVELAND	MOORE	POLICE DEPARTMENT	PRIMARY		154.7100	0.0000	KLA650
OK	CLEVELAND	MOORE	POLICE DEPARTMENT	SECONDARY		155.4150	0.0000	KLA650
OK	CLEVELAND	MOORE	POLICE DEPARTMENT	TERRITORY POLICE		155.5500	0.0000	KLA650
OK	CLEVELAND	NOBLE	FIRE DEPARTMENT	MUTUAL AID		154.1300	0.0000	KNAS821
OK	CLEVELAND	NOBLE	POLICE DEPARTMENT	PRIMARY		155.5200	0.0000	KNAS840
OK	CLEVELAND	NORMAN	FIRE DEPARTMENT	MUTUAL AID		154.1300	0.0000	KIY337
OK	CLEVELAND	NORMAN	FIRE DEPARTMENT	DISPATCH		154.3850	0.0000	KIY337
OK	CLEVELAND	NORMAN	POLICE DEPARTMENT	SECONDARY		154.6500	0.0000	KGK681
OK	CLEVELAND	NORMAN	POLICE DEPARTMENT	PRIMARY		154.7400	0.0000	KGK681
OK	COMANCHE	COUNTY	SHERIFF OFFICE	SECONDARY POLICE		453.3500	458.3500	KKN345
OK	COMANCHE	COUNTY	SHERIFF OFFICE	POLICE		453.6000	458.6000	KKN345
OK	COMANCHE	LAWTON	FIRE DEPARTMENT	PRIMARY FIRE		453.4000	458.4000	KXX483
OK	COMANCHE	LAWTON	FIRE DEPARTMENT	SECONDARY FIRE		453.4500	458.4500	KXX483
OK	COMANCHE	LAWTON	POLICE DEPARTMENT	DETECTIVE		453.4750	458.4750	
OK	COMANCHE	LAWTON	POLICE DEPARTMENT	DISPATCH	F1	453.2500	458.2500	KSM951
OK	COMANCHE	LAWTON	POLICE DEPARTMENT	INFORMATION	F2	453.3500	458.3500	KSM951
OK	CUSTER	COUNTY	FIRE DEPARTMENT	MUTUAL AID		154.1300	[illegible]	
OK	CUSTER	COUNTY	SHERIFF OFFICE	PRIMARY		155.4900	0.0000	KNEP918
OK	CUSTER	COUNTY	SHERIFF OFFICE	SECONDARY		155.6700	0.0000	KNEP918
OK	CUSTER	WEATHERFORD	FIRE DEPARTMENT	MUTUAL AID		154.1300	0.0000	KIZ338
OK	CUSTER	WEATHERFORD	POLICE DEPARTMENT	DISPATCH		154.8450	0.0000	KKY344
OK	GARFIELD	COUNTY	SHERIFF OFFICE	PRIMARY		155.5950	0.0000	KKJ713
OK	GARFIELD	ENID	FIRE DEPARTMENT	UNKNOWN		154.0100	0.0000	KKZ949
OK	GARFIELD	ENID	FIRE DEPARTMENT	MUTUAL AID		154.1300	0.0000	KKZ949
OK	GARFIELD	ENID	FIRE DEPARTMENT	UNKNOWN		154.4450	0.0000	KKZ949
OK	GARFIELD	ENID	POLICE DEPARTMENT	PRIMARY		155.5200	0.0000	KKA253
OK	GARFIELD	ENID	POLICE DEPARTMENT	SECONDARY		155.5800	0.0000	KKA253
OK	GRADY	COUNTY	SHERIFF OFFICE	SECONDARY		154.7700	0.0000	KNDK514
OK	GRADY	COUNTY	SHERIFF OFFICE	SECONDARY		154.8150	0.0000	KNDK514
OK	GRADY	COUNTY	SHERIFF OFFICE	SECONDARY		155.0100	0.0000	KNDK514
OK	GRADY	COUNTY	SHERIFF OFFICE	PRIMARY		155.1300	0.0000	KNDK514
OK	GRADY	COUNTY	TERRITORY POLICE			156.1500	0.0000	KNDK514
OK	KAY	COUNTY	SHERIFF OFFICE	DISPATCH		155.7750	0.0000	KNAY933
OK	KAY	PONCA CITY	FIRE DEPARTMENT	MUTUAL AID		154.1300	0.0000	KLA992
OK	KAY	PONCA CITY	POLICE DEPARTMENT	POLICE		155.5650	[illegible]	
OK	KINGFISHER	KINGFISHER	FIRE DEPARTMENT	MUTUAL AID		154.1300	[illegible]	
OK	KINGFISHER	KINGFISHER	POLICE DEPARTMENT	POLICE		155.3700	[illegible]	
OK	KINGFISHER	KINGFISHER	POLICE DEPARTMENT	POLICE		155.4900	0.0000	KLB200
OK	LOGAN	COUNTY	SHERIFF OFFICE	DISPATCH		37.0400	0.0000	KKT550
OK	LOGAN	GUTHRIE	FIRE DEPARTMENT	MUTUAL AID		154.1300	0.0000	KNJB964
OK	LOGAN	GUTHRIE	POLICE DEPARTMENT	PRIMARY		155.6100	0.0000	KKC487
OK	MC CLAIN	COUNTY	SHERIFF OFFICE	PRIMARY		155.5500	[illegible]	
OK	MC CLAIN	NEWCASTLE	FIRE DEPARTMENT	MUTUAL AID		154.1300	0.0000	WNAS723
OK	MC CLAIN	NEWCASTLE	POLICE DEPARTMENT	SECONDARY		155.4900	0.0000	KVF710
OK	MC CLAIN	NEWCASTLE	POLICE DEPARTMENT	PRIMARY POLICE		155.5500	0.0000	KVF710
OK	MUSKOGEE	COUNTY	SHERIFF OFFICE	PRIMARY		154.7250	0.0000	WNGN655
OK	MUSKOGEE	COUNTY	TERRITORY POLICE	TERRITORY POLICE		155.9100	0.0000	KDK668
OK	MUSKOGEE	MUSKOGEE	FIRE DEPARTMENT	DISPATCH		154.3400	0.0000	KKU490
OK	MUSKOGEE	MUSKOGEE	FIRE DEPARTMENT	SECONDARY		154.4300	0.0000	KKU490
OK	MUSKOGEE	MUSKOGEE	POLICE DEPARTMENT	PRIMARY		155.1300	0.0000	KKA786
OK	MUSKOGEE	MUSKOGEE	POLICE DEPARTMENT	SECONDARY POLICE		155.2500	0.0000	KKA786
OK	NOBLE	COUNTY	SHERIFF OFFICE	PRIMARY		155.6500	0.0000	KYS958
OK	NOBLE	COUNTY	SHERIFF OFFICE	SECONDARY		156.1500	0.0000	KYS958
OK	NOBLE	PERRY	FIRE DEPARTMENT	MUTUAL AID		154.1300	0.0000	KKZ513
OK	NOBLE	PERRY	POLICE DEPARTMENT			156.1500	0.0000	WCT212
OK	OKLAHOMA	BETHANY	FIRE DEPARTMENT	DISPATCH		153.8000	0.0000	KNJS428
OK	OKLAHOMA	BETHANY	POLICE DEPARTMENT	POLICE		460.4000	465.4500	KKJB35
OK	OKLAHOMA	CHOCTAW	FIRE DEPARTMENT	MUTUAL AID		154.1300	[illegible]	
OK	OKLAHOMA	CHOCTAW	FIRE DEPARTMENT	UNKNOWN		154.3700	0.0000	KNIP570
OK	OKLAHOMA	CHOCTAW	POLICE DEPARTMENT	PRIMARY DISPATCH		37.0200	0.0000	KZC489
OK	OKLAHOMA	CHOCTAW	POLICE DEPARTMENT	SECONDARY POLICE		37.0500	[illegible]	

OK	OKLAHOMA	CHOCTAW	TERRITORY POLICE			37.3800	0.0000 KZQ489
OK	OKLAHOMA	COUNTY	SHERIFF OFFICE	VOLUNTEER SHERIFFS		37.2600	0.0000 KMC964
OK	OKLAHOMA	COUNTY	SHERIFF OFFICE	PRIMARY SHERIFF		460.3500	465.3500 KNGK230
OK	OKLAHOMA	COUNTY	SHERIFF OFFICE	SECONDARY		460.4750	465.4750 KNGK230
OK	OKLAHOMA	DEL CITY	FIRE DEPARTMENT	DISPATCH		154.0100	0.0000 WSL594
OK	OKLAHOMA	DEL CITY	POLICE DEPARTMENT	SECONDARY		37.2600	0.0000 KKM399
OK	OKLAHOMA	DEL CITY	POLICE DEPARTMENT	PRIMARY POLICE		453.5500	458.5500 KKM399
OK	OKLAHOMA	EDMOND	FIRE DEPARTMENT	UNKNOWN		154.3700	0.0000 KNJV867
OK	OKLAHOMA	EDMOND	FIRE DEPARTMENT	DISPATCH		154.4300	0.0000 KNJV867
OK	OKLAHOMA	EDMOND	FIRE DEPARTMENT	UNKNOWN		154.4300	0.0000 KNJV867
OK	OKLAHOMA	EDMOND	POLICE DEPARTMENT	PRIMARY POLICE		460.2000	465.2000 WZN437
OK	OKLAHOMA	EDMOND	POLICE DEPARTMENT	SECONDARY POLICE		460.2500	465.2500 WZN437
OK	OKLAHOMA	HARRAH	FIRE DEPARTMENT	MUTUAL AID		154.1300	0.0000
OK	OKLAHOMA	HARRAH	POLICE DEPARTMENT	POLICE		37.2400	0.0000 KXL392
OK	OKLAHOMA	JONES	FIRE DEPARTMENT	MUTUAL AID		154.1300	0.0000
OK	OKLAHOMA	JONES	FIRE DEPARTMENT	UNKNOWN		154.3700	0.0000 KHNT561
OK	OKLAHOMA	JONES	POLICE DEPARTMENT	POLICE		37.2600	0.0000 KZV335
OK	OKLAHOMA	MIDWEST CITY	FIRE DEPARTMENT	UNKNOWN		153.9500	0.0000 WQD403
OK	OKLAHOMA	MIDWEST CITY	FIRE DEPARTMENT	DISPATCH		154.2050	0.0000 WQD403
OK	OKLAHOMA	MIDWEST CITY	POLICE DEPARTMENT	SECONDARY POLICE		460.1000	465.1000 KKD262
OK	OKLAHOMA	MIDWEST CITY	POLICE DEPARTMENT	PRIMARY POLICE		460.1250	465.1250 KKD262
OK	OKLAHOMA	NICHOLS HILLS	FIRE DEPARTMENT	MUTUAL AID		154.1300	0.0000 KNGE612
OK	OKLAHOMA	NICHOLS HILLS	FIRE DEPARTMENT	UNKNOWN		154.2200	0.0000 KNGE612
OK	OKLAHOMA	NICHOLS HILLS	POLICE DEPARTMENT	PRIMARY		154.7250	0.0000 KRI618
OK	OKLAHOMA	NICHOLS HILLS	POLICE DEPARTMENT	SECONDARY		158.9100	0.0000 KRI618
OK	OKLAHOMA	NICOMA PARK	FIRE DEPARTMENT	MUTUAL AID		154.1300	0.0000 KNIW980
OK	OKLAHOMA	NICOMA PARK	FIRE DEPARTMENT	UNKNOWN		154.3700	0.0000 KNIW980
OK	OKLAHOMA	NICOMA PARK	POLICE DEPARTMENT			37.4000	0.0000 KXD241
OK	OKLAHOMA	OKLAHOMA CITY	AMATEURS	GENERAL REPEATER		146.6700	0.0000
OK	OKLAHOMA	OKLAHOMA CITY	AMATEURS	SEVER WEATHER NETWORK		146.8200	0.0000
OK	OKLAHOMA	OKLAHOMA CITY	AMATEURS	TRS80 C.C. NET		146.8500	0.0000
OK	OKLAHOMA	OKLAHOMA CITY	AMATEURS	BROADCAST ENGINEERS		147.0300	0.0000
OK	OKLAHOMA	OKLAHOMA CITY	AMCARE	SECONDARY DISPATCH		453.3750	458.3750
OK	OKLAHOMA	OKLAHOMA CITY	AMCARE	PRIMARY DISPATCH		453.4750	458.4750
OK	OKLAHOMA	OKLAHOMA CITY	AMCARE	TERRITORY DISPATCH		453.5000	458.5000
OK	OKLAHOMA	OKLAHOMA CITY	AMCARE	AID/CAR		453.9750	458.9750
OK	OKLAHOMA	OKLAHOMA CITY	COMBINED COMMUNICATION	TERRITORY CHANNEL		170.1500	0.0000
OK	OKLAHOMA	OKLAHOMA CITY	COMBINED COMMUNICATION	PRIMARY CHANNEL		450.0875	0.0000
OK	OKLAHOMA	OKLAHOMA CITY	COMBINED COMMUNICATION	SECONDARY CHANNEL		450.3875	0.0000
OK	OKLAHOMA	OKLAHOMA CITY	FIRE DEPARTMENT	UNKNOWN		453.3000	458.3000 KIB377
OK	OKLAHOMA	OKLAHOMA CITY	FIRE DEPARTMENT	CHIEFS CHANNEL		453.7000	458.7000 KIB377
OK	OKLAHOMA	OKLAHOMA CITY	FIRE DEPARTMENT	SECONDARY DISPATCH	F1	453.1500	458.1500 KIB377
OK	OKLAHOMA	OKLAHOMA CITY	FIRE DEPARTMENT	PRIMARY DISPATCH	F2	453.3500	458.3500 KIB377
OK	OKLAHOMA	OKLAHOMA CITY	FIRE DEPARTMENT	FIREGROUND #1	F3	453.6000	458.6000 KIB377
OK	OKLAHOMA	OKLAHOMA CITY	FIRE DEPARTMENT	FIREGROUND #2	F5	453.4500	458.4500 KIB377
OK	OKLAHOMA	OKLAHOMA CITY	KAUT TV43	NEWS REMOTES		450.2875	0.0000
OK	OKLAHOMA	OKLAHOMA CITY	KAUT TV43	SECONDARY NEWS REMOTES		450.4875	0.0000
OK	OKLAHOMA	OKLAHOMA CITY	KEBC RADIO	PRIMARY CHANNEL		450.0500	0.0000
OK	OKLAHOMA	OKLAHOMA CITY	KEBC RADIO	SECONDARY CHANNEL		450.1500	0.0000
OK	OKLAHOMA	OKLAHOMA CITY	KLITE RADIO	NEWS BROADCASTS		450.7000	0.0000
OK	OKLAHOMA	OKLAHOMA CITY	KNOR RADIO	GENERAL		450.4500	0.0000
OK	OKLAHOMA	OKLAHOMA CITY	KOCO TV5	PRIMARY NEWS REMOTES		450.0875	0.0000
OK	OKLAHOMA	OKLAHOMA CITY	KOCO TV5	SECONDARY NEWS REMOTES		450.3875	0.0000
OK	OKLAHOMA	OKLAHOMA CITY	KOCO TV5	TERRITORY NEWS REMOTES		450.4875	0.0000
OK	OKLAHOMA	OKLAHOMA CITY	KTOK RADIO	SKYWATCH 10		161.7300	0.0000
OK	OKLAHOMA	OKLAHOMA CITY	KTOK RADIO	PRIMARY CHANNEL		450.0000	0.0000
OK	OKLAHOMA	OKLAHOMA CITY	KTVY TV4	SECONDARY		166.2500	0.0000
OK	OKLAHOMA	OKLAHOMA CITY	KTVY TV4	PRIMARY CHANNEL		455.1875	0.0000
OK	OKLAHOMA	OKLAHOMA CITY	KWTV TV9	NEWS REMOTES		450.5500	0.0000
OK	OKLAHOMA	OKLAHOMA CITY	LAKE RANGERS	PRIMARY		159.4050	151.3100
OK	OKLAHOMA	OKLAHOMA CITY	LOCAL GOVERNMENT	GOVERNMENT OFFICIALS		155.8550	0.0000 VARIOUS
OK	OKLAHOMA	OKLAHOMA CITY	MID-OKLAHOMA EMERGENCY SE	EMERGENCY		155.2650	0.0000
OK	OKLAHOMA	OKLAHOMA CITY	NOAA WEATHER	24 HR WEATHER		162.4000	0.0000
OK	OKLAHOMA	OKLAHOMA CITY	OKLAHOMA EMS	PRIMARY		462.9500	467.9500 WQM686
OK	OKLAHOMA	OKLAHOMA CITY	OKLAHOMA EMS	SECONDARY		462.9750	467.9750 WQM687
OK	OKLAHOMA	OKLAHOMA CITY	OKLAHOMA PUBLIC UTILITY	SECONDARY CHANNEL		173.3250	0.0000
OK	OKLAHOMA	OKLAHOMA CITY	OKLAHOMA PUBLIC UTILITY	PRIMARY CHANNEL		452.9750	0.0000
OK	OKLAHOMA	OKLAHOMA CITY	POLICE DEPARTMENT	HEADQUARTERS COMMAND		156.6000	0.0000
OK	OKLAHOMA	OKLAHOMA CITY	POLICE DEPARTMENT	C.I.C.U.	1	159.0900	156.0900 KKC867
OK	OKLAHOMA	OKLAHOMA CITY	POLICE DEPARTMENT		2	158.7600	0.0000
OK	OKLAHOMA	OKLAHOMA CITY	POLICE DEPARTMENT	SOUTH PATROL	2	159.0300	156.0300 KKC867
OK	OKLAHOMA	OKLAHOMA CITY	POLICE DEPARTMENT	SWAT/DET	3	158.7300	155.7300 KKC867

OK	OKLAHOMA	OKLAHOMA CITY	POLICE DEPARTMENT	CENTRAL/DET	4	158.7900	155.7900 KKC867
OK	OKLAHOMA	OKLAHOMA CITY	POLICE DEPARTMENT	NORTH PATROL	5	158.9700	155.9700 KKC867
OK	OKLAHOMA	OKLAHOMA CITY	TINKER AFB	NORTH RAPCON		121.0500	0.0000
OK	OKLAHOMA	OKLAHOMA CITY	TINKER AFB	GROUND CONTROL		121.8000	0.0000
OK	OKLAHOMA	OKLAHOMA CITY	TINKER AFB	SOUTH RAPCON		124.2000	0.0000
OK	OKLAHOMA	OKLAHOMA CITY	TINKER AFB	LOCAL CONTROL		126.2000	0.0000
OK	OKLAHOMA	OKLAHOMA CITY	TINKER AFB	PRIMARY POLICE		150.3150	0.0000
OK	OKLAHOMA	OKLAHOMA CITY	WILEY POST AIRPORT	ATIS		113.4000	0.0000
OK	OKLAHOMA	OKLAHOMA CITY	WILEY POST AIRPORT	LOCAL CONTROL		120.6500	0.0000
OK	OKLAHOMA	OKLAHOMA CITY	WILEY POST AIRPORT	GROUND CONTROL		121.7000	0.0000
OK	OKLAHOMA	OKLAHOMA CITY	WILEY POST AIRPORT	LOCAL CONTROL		126.9000	0.0000
OK	OKLAHOMA	OKLAHOMA CITY	WILL ROGERS AIRPORT	LOCAL CONTROL		118.3000	0.0000
OK	OKLAHOMA	OKLAHOMA CITY	WILL ROGERS AIRPORT	SF-EB RAPCON/FABCON		119.3000	0.0000
OK	OKLAHOMA	OKLAHOMA CITY	WILL ROGERS AIRPORT	NF-EB RAPCON		121.0500	0.0000
OK	OKLAHOMA	OKLAHOMA CITY	WILL ROGERS AIRPORT	GROUND CONTROL		121.9000	0.0000
OK	OKLAHOMA	OKLAHOMA CITY	WILL ROGERS AIRPORT	LOCAL SE SECTOR		124.2000	0.0000
OK	OKLAHOMA	OKLAHOMA CITY	WILL ROGERS AIRPORT	SF-WB RAPCON		124.6000	0.0000
OK	OKLAHOMA	OKLAHOMA CITY	WILL ROGERS AIRPORT	PILOT ATIS		125.8500	0.0000
OK	OKLAHOMA	OKLAHOMA CITY	WILL ROGERS AIRPORT	LOCAL SW SECTOR		126.6500	0.0000
OK	OKLAHOMA	OKLAHOMA CITY	WILL ROGERS AIRPORT	POLICE		158.8950	0.0000
OK	OKLAHOMA	OKLAHOMA CITY	WKY RADIO	REMOTE BROADCAST		450.2500	0.0000
OK	OKLAHOMA	OKLAHOMA CITY	WKY RADIO	ROADWATCH 93		450.7500	0.0000
OK	OKLAHOMA	THE VILLAGE	FIRE DEPARTMENT	MUTUAL AID		154.1300	0.0000 KKV290
OK	OKLAHOMA	THE VILLAGE	POLICE DEPARTMENT	POLICE		460.0250	465.0250 KEX314
OK	OKLAHOMA	TINKER AFB	FIRE DEPARTMENT	FIRE		163.5375	0.0000
OK	OKLAHOMA	TINKER AFB	POLICE DEPARTMENT	SECONDARY POLICE		163.4875	0.0000
OK	OKLAHOMA	WARR ACRES	FIRE DEPARTMENT	UNKNOWN		154.1300	0.0000 WQD280
OK	OKLAHOMA	WARR ACRES	FIRE DEPARTMENT	FIRE		155.7600	0.0000 WQD280
OK	OKLAHOMA	WARR ACRES	POLICE DEPARTMENT	SECONDARY POLICE		37.1400	0.0000
OK	OKLAHOMA	WARR ACRES	POLICE DEPARTMENT	PRIMARY POLICE		460.1500	465.1500 KNDN594
OK	POTTAWATOMIE	COUNTY	SHERIFF OFFICE	SECONDARY		154.8900	0.0000 KKM246
OK	POTTAWATOMIE	COUNTY	SHERIFF OFFICE	PRIMARY		155.5800	0.0000 KKM246
OK	POTTAWATOMIE	SHAWNEE	FIRE DEPARTMENT	MUTUAL AID		154.1300	0.0000 KKV900
OK	POTTAWATOMIE	SHAWNEE	POLICE DEPARTMENT	PRIMARY		154.8600	0.0000 KKA983
OK	POTTAWATOMIE	SHAWNEE	POLICE DEPARTMENT	SECONDARY		155.5800	0.0000 KKA983
OK	POTTAWATOMIE	SHAWNEE	TERRITORY POLICE	TERRITORY POLICE		159.1500	0.0000
OK	STATEWIDE		FIRE DEPARTMENT	MUTUAL AID		154.1300	0.0000
OK	STATEWIDE		HEAR SYSTEM	AMBULANCE TO HOSPITAL		155.3400	0.0000
OK	STATEWIDE		HIGHWAY PATROL	PRIMARY		44.9000	0.0000
OK	STATEWIDE		HIGHWAY PATROL	SECONDARY		45.1000	0.0000
OK	STATEWIDE		HIGHWAY PATROL	SECONDARY		45.2000	0.0000
OK	STATEWIDE		MEDI-FLIGHT			462.9500	467.9500
OK	STATEWIDE		OKLAHOMA HIGHWAY PATROL	PRIMARY		44.7000	0.0000
OK	STATEWIDE		OKLAHOMA HIGHWAY PATROL	CHEROKEE REPEATER		154.9050	0.0000
OK	STATEWIDE		OKLAHOMA RESCUE	RESCUE TEAMS		155.1600	0.0000
OK	STATEWIDE		POLICE DEPARTMENT	INTERCITY		37.1000	0.0000
OK	STATEWIDE		POLICE DEPARTMENT	INTERCITY		37.1200	0.0000
OK	STATEWIDE		POLICE DEPARTMENT	INTERCITY		37.2600	0.0000
OK	STATEWIDE		POLICE DEPARTMENT	O.S.B.I.		154.6550	0.0000
OK	STATEWIDE		POLICE DEPARTMENT	COMMON POLICE		155.3700	0.0000
OK	STATEWIDE		POLICE DEPARTMENT	COMMON POLICE		155.4900	0.0000
OK	STATEWIDE		POLICE DEPARTMENT	COMMON POLICE		155.5500	0.0000
OK	STATEWIDE		POLICE DEPARTMENT	COMMON POLICE		155.6700	0.0000
OK	STATEWIDE		POLICE DEPARTMENT	COMMON		155.7600	0.0000
OK	STATEWIDE		TURNPIKE AUTHORITY		1	156.1050	0.0000
OK	STATEWIDE		TURNPIKE AUTHORITY		2	156.1800	0.0000

RCMA has a Telephone Number

The new RCMA telephone number is (714)545-9551. It's 'manned' by an answering machine, and while it's been established for RCMA members, its use is limited. You may leave a message concerning delivery or renewal problems; you cannot use it to request club information or order back issues. Appropriate response will be made by letter or postcard, not by telephone. Any call regarding a membership problem MUST be accompanied by your membership number.

Please remember that it is a toll call, so be sure before you dial that a written communication won't do just as well.

PUBLIC SAFETY NORTH CENTRAL

Send Public Safety and Special Emergency frequencies, radio system details and questions as follows—Iowa, Kansas, Minnesota, Missouri, Nebraska, North and South Dakota:

Michael W. Scheel, 25265 35th Ave, Walcott IA 52773

Welcome to PS-NC for October. Very little has come my way in the last month, mainly I think you all are out enjoying the summer. So on to the Column.

IOWA >>>>>

Davenport Public Library uses 49.83 with one of those cheap HTs from Radio Shack, for communications between the security guard and the front desk. Maybe after the current budget crunch is over, maybe they can get real radios. (MWS IA-011)

The Quad-City Times BIX 7 Road Race is over for another year. This year maybe you saw it on local TV. As the coverage just gets better.

460.150 Davenport PD Tac 2, traffic control
462.950 Medic Dispatch, medical transport
146.880 Race Net, command post
146.940 Medical Net, requests for runners down
170.150 Palmer Communications (TV coverage)
they had 8 cameras plus ones in a Helicopter, the Lead Truck, and a motorcycle. (MWS IA-011)

The saga of Scott County's 911 system continues, there are about 80-90 homes served by the Durant (785-XXXX) and Bennett (893-XXXX) exhanges who will be getting 911 service until Cedar County gets it (date ?). In a related note a former volunteer firefighter from Walcott has told me that Scott County Sheriff willnot dispatch emergency calls from outside the county for those departments that have district areas lying outside Scott County. This affects five VFDs in Scott County. (No VFDs outside the county serves areas into Scott. (MWS IA-011)

TAMA County Sheriff (Doug IA-048)

Dispatch from County Seat [Toledo]

	BASE	MOBILE	
OPS	154.830	154.830	
INFO	155.310	155.910	
AID	155.475	155.475	
FIRE	154.205	154.205	
LEA	155.685		Cedar Rapids State through the Brooklyn RPT
POINT	155.370		

Tama CO. SO dispatches for Tama County. City of Tama has own dispatch.

City of Tama Police, Fire, and Ambulance all use 155.955.
Police also has 154.830.

City of Toledo

Police is dispatched through County Radio 154.830
Fire F1 154.205, F2 154.100
154.100 is also used for City Street Dept. Police also have it their radios.

Some surrounding Counties

Marshall County (which has gone to 911)
OPS 154.830
Fire 155.310 (Dispatch) 911
Fire countywide 154.385

City of Marshalltown
156.000 Police
154.385 Fire
155.160 Ambulance

the rest of the county is dispatched through SO

Black Hawk County SO
154.785R Dispatch

Powesheik County
154.845 Sheriff Dispatch

MINNESOTA >>>>>

In a earlier column the mention of 160.335 as a Minnesota Highway Patrol frequency in the Metro area. This has been confirmed as an auxillary channel for Golden Valley. (Paul NJ-72)

Ramsey County MN Frequency List
a report from Minnesota Radio Hobbyists

154.220	Ramsey County Fire	KYY874
154.295	Statewide Fire Mutual Aid	KYY874
154.370	Lake Johana Fire (truck to truck)	KAI788
154.770	Ramsey Sheriff Ch#2 (Operations & Warrant Office)	KAJ406
155.145	?	KA49876
155.160	Emergency Services Simplex	KJG394
155.295	Emergency Services Simplex	KJG394
155.295	Emergency Services RPT (154.115)	WNBW590
155.370	Point to Point Intersystem (Base only)	KAJ406
155.475	Statewide Police Emergency Intersystem (MINSEL)	KAJ406
155.625	Ramsey County Ch#1 Primay RPT (154.710)	KAJ406
156.150	Ramsey Sheriff Ch#6	KAJ406
460.125	Ramsey County Co-op RPT	KAJ406
460.275	Metro-Emergency Police Intersystem RPT	KAJ406
460.325	Ramsey Sheriff Information RPT	KAJ406
453.375	Parks & Recreation Dept. RPT	KKL712 KAO817
453.525	Ramsey County Highway Dept. RPT	KUY445

Misc. >>>>>

This is it for another month, see you in November. -30-

PUBLIC SAFETY—NORTH EAST

Send Public Safety amd Special Emergency frequencies, radio system details, and questions as follows—New England States, New York, Pennsylvania, New Jersey, Maryland, Deleware, and District of Columbia:

Gary Saffer, 6 Roach Road, Stoughton, MA 02072

Welcome to the October edition of PSNE. We have so much info this week I don't have room to say anymore. So now on to the stuff.

Our first piece is from Karen (CT-096), who sends us a list of Connecticut State Police Codes,Location Codes, and a Troop Map. karen says 42.48 (Trrops F,I) and 45.86 (State Hotline are the most active frequencies in her area.

Connecticut State Police Codes

Priority Signals

A. Emergency
B. Sensitive Information
1. Department-Wide Mobilization
T1. Test Alert Signal
2. Emergency Operational Plans
3. State Capitol
4. Governer's Resisdence
5. Priority Use of Radio Channel
6. Priority use of Tactical Channel 1
7. 1HQ-Home Check

Motor Vehicle Signals

10. Accident
11. Fatal Accident
12. Motor Vehicle Violation
13. Intoxicated M.V. Operator
14. Disabled Motorist
15. Motor Vehicle Data Request
16. Stolen Motor Vehicle Check
17. Operator's License Check

Criminal Activity

20. Missing or Wanted Check
21. Sexual Offense
22. Stolen Motor Vehicle
23. Alarm
23a. Active Alarm
23b. Active Alarm-no Response
23c. False Alarm Proper Response
24. Bomb Threat
25. Escape
26. Hostage

Procedural Signals

31. Out of Service
32. In Service
33. Call Troop by Phone
34. What is your Location?
35. Return to Troop
36. Transport Passenger
37. Transport Prisoner
38. Transport Package
39. Radio Test Call
40. Repeat Transmission
41. Check Radio Tower
42. Radioactive Material
43. Intoxicated Material
44. Untimely Death
45. Missing Person
46. Fires
47. Bank Check
48. Blood Relay
49. Midnight Shift Check
50. Voluntary Response

Location Codes

01 Andover
02 Ansonia
03 Ashford
04 Avon
05 Barkhamsted
06 Beacon Falls
07 Berlin
08 Bethany
09 Bethel
10 Bethlehem
11 Bloomfield
12 Bolton
13 Bozrah
14 Branford
15 Bridgeport
16 Bridgewater
17 Bristol
18 Brookfield
19 Brooklyn
20 Burlington
21 Canaan
22 Canterbury
23 Canton
24 Chaplin
25 Cheshire
26 Chester
27 Clinton
28 Colchester
29 Colebrook
30 Columbia
31 Cornwall
32 Coventry
33 Cromwell
34 Danbury
35 Darien
36 Deep River
37 Derby
38 Durham
39 Eastham
40 East Granby
41 East Haddam
42 East Hampton
43 East Hartford
44 East Haven
45 East Lyme
46 Easton
47 East Windsor
48 Ellington
49 Enfield
50 Essex
51 Fairfield
52 Farmington
53 Franklin
54 Glastonbury
55 Goshen
56 Granby
57 Greenwich
58 Griswold
59 Groton
60 Guilford
61 Haddam
62 Hamden
63 Hampton
64 Hartford
65 Hartland
66 Harwinton
67 Hebron
68 Kent
69 Killingly
70 Killingsworth
71 Lebanon
72 Ledyard
73 Lisbon
74 Litchfield
75 Lyme
76 Madison
77 Manchester
78 Mansfield
79 Marlboro
80 Meriden
81 Middlebury
82 Middlefield
83 Middletown
84 Milford
85 Monroe
86 Montville
87 Morris
88 Naugatuck
89 New Britain
90 New Canaan
91 New Fairfield
92 New Hartford
93 New Haven
94 Newington
95 New London
96 New Milford
97 Newtown
98 Norfolk
99 Norht Branford
100 North Canaan
101 North Haven
102 North Stonington
103 Norwalk
104 Norwich
105 Old Lyme
106 Old Saybrook
107 Orange
108 Oxford
109 Plainfield
110 Plainville
111 Plymouth
112 Pomfret
113 Portland
114 Preston
115 Prospect
116 Putnan
117 Redding
118 Ridgefield
119 Rocky Hill
120 Roxbury
121 Salem
122 Salisbury
123 Scotland
124 Seymour
125 Sharon
126 Shelton
127 Sherman
128 Simsbury
129 Somers
130 Southbury
131 Southington
132 South Windsor
133 Sprague
134 Stafford
135 Stamford
136 Sterling
137 Stonington
138 Stratford
139 Suffield
140 Thomaston
141 Thompson
142 Tolland
143 Torrington
144 Trumbull
145 Union
146 Vernon
147 Voluntown
148 Wallingford
149 Warren
150 Washington
151 Waterbury
152 Waterbury
153 Watertown
154 Westbrook
155 West Hartford
156 West Haven
157 Weston
158 Westport
159 Wehterfield
160 Willington
161 Wilton
162 Winchester
163 Windham
164 Windsor
165 Windsor Locks
166 Wolcott
167 Woodbridge
168 Woodbury
169 Woodstock
170 Alabama
171 Arizona
172 Arkansas
173 California
174 Colorado
175 Delaware
176 Washington DC
177 Florida
178 Georgia
179 Idaho
180 Illinois
181 Indiana
182 Iowa
183 Kansas
184 Kentucky
185 Louisiana
186 Maine

187 Maryland
188 Massachusetts
189 Michigan
190 Minnesota
191 Missippi
192 Missouri
193 Montana
194 Nebraska
195 Nevada
196 New Hampshire
197 New Jersey
198 New Mexico
199 New York
200 New Mexico
201 North Dakota
202 Ohio
203 Oklahoma
204 Oregon
205 Pennsylvania
206 Rhode Island
207 South Carolina
208 south Dakota
209 Tennessee
210 Texas
211 Utah
212 Vermont
213 Virginia
214 Washington
215 West Virginia
216 Wisconsin
217 Wyoming
218 Alaska
219 Hawaaii
221 Canada
222 Fairfield Co.
223 Hartford County
224 Litchfield Co.
225 Middlesex Co.
226 New Haven CO.
227 New London Co.
228 Tolland Co.
229 Windham Co.

Karen also included another code list also marked Conn. State Police that seems to duplicate part of the first list. Does any one out there know which one or if maybe both are currently in use?

Connecticut State Police

1 Stand by
2 See Complainant
3 Test Call
4 Motor Veh. Data
5 Motor Veh. Stolen Check
6 Motor Veh Stolen Check and Date
7 Hit and Run
8 Intoxicated Oper.
9 Motor Veh. Vilolation (taking without Permission)
10 Accident
11 Auto Accident-Fatal
12 Breach of Peach-Family Fight
13 Hold up
14 On the Air
15 Off the Air
16 Phone Call
17 Escape
18 Try to Locate
19 Airplane Accident
20 Unkown type of Complaint
21 Bank Escort
22 Mail Escort
23 Strike Duty
24 Assault
25 Prowlers
27 Burglary
28 Drowning
29 What is your Location
30 Stop Car for Investigation
31 Check Designated Bank or Post Off
32 Remove Vehicle Markings
33 Check Radio Tower
34 Convoy 34X Explosives
35 Abduction
36 Adultry
37 Arson
38 Abandonment or Desertion
39 Bigamy
40 Blackmail
41 Bribery
42 Carnal Knowledge of Minor
43 Check Fraud
44 Person is Armed
45 Counterfeiting
46 Embezzlement
47 False Pretense
48 Forgery
49 Fornication
50 Any Message for Me
51 Assistamce for Arrest
52 Assistance Wanted Officer Injured
53 Assistance Wanted Disturbance
54 Assistance Wanted Traffic control
55 Officers double up in State Cars
56 Before Stopping Cars at Night
57 Intoxication
58 Weather and Road conditions
59 Stand by on air Stop Routine Tranmissons
60 Transport Passenger
61 Transport Package
62 Make Purchase or Pick up Order
63 Hold Occupants of Car
64 Watch for and Stop Designated Car
65 Watch for Vehicle Do Not Stop
66 Personal Assistance Required
67 Conceal Officer at Post
68 Stop Traffic
69 Industrial Explosion
70 Phone Home
71 Phone Office for Message
72 Phone Office-Advise Location
73 Phone Office Await Arrival
74 Reservoir Check
75 Phone Office Advise Where Going
76 Phone Office on Way There
77 Pre-Arranged Plan Prison*
77R Pre-Arranged Plan Reform. Cheshire
77X Pre-Arranged Plan Prison Farm
77Y Pre-Arranged Plan Prison**
78 Untimely Death
79 Return to Your Station
80 Hijacking
81 Incest
82 Kidnapping
83 Larceny
84 Lascivious Carriage
85 Lottery Tickets
86 Non-Support
87 Narcotics
88 Prostitution
89 Rape
90 Sodomy
91 Seduction
92 Trespassing
93 AWOL or Deserter (military)
94 Misdemeanor for which there is no other Signal
95 Felony for which there is no other Signal

96	Stolen Motor Vehicle
97	Stolen Motor Vehicle Plates
98	Missing Persons
99	Extend Courtesies of the Road
100	Hurricane-Tidal Waves-Flood
101	Riots
102	Fire
103	Railroad Wreck
104	Bridge Collapse
105	Confidential Advance Notice of Emergency
106	Car Registered to State Pol.
107	Request Permission to Carry Passenger
108	What are Traffic Conditions?
109	Alert Entire Department Pending Emergency
110	Mobilization-Entire Department
113	To be used by Mobile Units to inform troop A. Keep Conversation in code B. To be used by troop if they can talk freely- If not to turn volume down and use handset for receiving message
114	CSBI Check Wanted or Missing Only
115	Transport Prisoner
116	Parolee
117	Prearranged order
118	Disabled Motorist
119	Check Troubled Alarm at Location
120	Repeat Transmission
125	Homocide-Murder-Manslaughter
142	Complete State Police Form 142C
500	Emergency at Troop
600	Emergency Alarm-Governers Mansion

*Maximum Security Prison **Minimum Security Prison

Thanks karen for a reaaly nice Contribution.

Next we have a list of Delaware, Pennsylvania and Maryland frequencies from Jeff (Pa-239)

Delaware State Police

154.665	Channel 1
154.770	Channel 2 Central
154.695	Car to Car
154.650	Dispatch
44.86	F1 Car to Base
45.020	F2
155.640	F4

New Castle County Police

153.740	Dispatch
158.805	Car to Car
154.860	F1
39.860	F1
39.540	F2
39.700	F3
155.490	Detectives
155.475/155.115/153.800 ???	

Newark Delaware PD

155.250	F1
154.860	F2
156.030	F3

Wilmington Delaware PD

155.130	Dispatch
155.610	F2
154.860	Vice

Maryland State Police

39.100	F1
39.260	F2
39.140	F5 Barracks J
155.475	Barracks to Barracks

Cecil County Sheriff

39.90	Rising Sun Channel 1
39.94	Rising Sun Channel 2

Cecil County Fire

46.180	F1
46.400	F2
46.540	F3

Pennsylvania State Police

42.600	F1
154.755	F2
155.850	F3

New Castle County Del. Fire

33.780	Dispatch
33.940	F2

Wilmington Del. Fire

154.965	Dispatch
155.550	F2

A few last minute additions corrections and miscelaneous bits that just couldn't wait until next month.

First from Albert Lorence (PA-029), the following corrections to the Pennsylvania info published in the JULY issue. Neither of the codes published is used by the PSP, They use their own code which was published several years ago in the newsletter. This is basically the standard APCO code as published in the beginning of the Public Safety section with some additions. I will print those at the bottom of this section. 159.075 is channel two of the Pennsyvania Turnpike radio system (159,045 is channel 1). These two frequencies are used by Police, Tow Trucks, and maintenance crews. also all interchanges, maintenance shaeds and PSP barracks on the pike have radios with these frequencies. The listing in July of "Plymouth to Harrisburg" was in reference to the Plymouth Meeting maintenance shed calling the main

turnpike dispatch point at Harrisburg. 155.580 is the Channel "A" base station frequency of the PSP"Avondale" is the location of a PSP barracks which is heard on Channel "A". 154.755 is the PSP car to car frequency. 155.670 is the Channel "B" base frequency.

Pennsylvania State Police changes to APCO ten-codes

10-7R Out of service at Residence
10-7 Permanent Dead
10-21I Call station by phone immediately
10-25I Return to stationimmediately
10-37 Intoxicated person
10-40 Advise if on station or available
10-42 Does not conform to regulations
10-43 Advise road and weather conditions
10-44 stations involved acknowledge
10-45 Motor vehicle accident
10-46 Holding suspect--rush reply
10-47 Send Ambulance
10-88 Package for ...
10-89 ... is calling you
10-97 Radio check
10-99 Emergency at this station
Signal-33 Help me quick

During the month of July the Quincy,MA Police Department adopted a new patrol system using one man cars. At the same time they also adopted a new unit numbering system. This system falls in line with the BAPERN numbering system. The numbers assigned to Quincy are 751 through 810. Through diligent research I have managed to identify most of the unit assignments and have them listed below. These are as follows.

741-759 Command staff
760-769 Motorcycles 760 is a sergeant
770-772 Sergeants
773-775 Able units-West Qunicy
776-779 Bravo Units- North Qunicy,Wollaston, Squantum
780-782 Charlie units- Houghsneck, Germantown, Merrymount
783-786 Delta units Qunicy Point, South Qunicy
791 Wagon
794-795 Jacob Juvenile officers
796-800 India General Invetigaters
801-804 Ocean Organized Crime unit

768 Echo unit possibly leiutenant not motorcycle. Uniform units (no BAPERN numbers) are boats. Baystate 1 & 2 are private ambulance units that provide service to the city.

Currently QPD is alternating between 453.225 and 453.250 453.275 has been quiet lately and may in fact be used simplex only by detectives. Listen in on 470.3375 since this is the future BAPERN channel.

This is the first in a continuing series of Reader Profiles from the Northeast area. I will be running these as I recieve them from Bill Mauldin These should prove to contain some of the "hotter" frequencies for the areas that they cover. Let me know if you find anything interesting on these frequencies.

Northcentral Connecticut and Western Massachusetts

1. 154.310R Hartford FD
2. 154.400 Springfield MA FD
3. 155,385 Life Star Hartford
4. 154.385 W. Hartford FD
5. 154.190 New Britain CT FD
6. 154.070 Holyoke MA FD
7. 159.210R Holyoke MA PD
8. 154.355 Manchester CT FD
9. 460.050R Hartford CT PD North
10. 460.200R Hartford CT PD South
11. 460.375R Hartford CT PD Towing
12. 460.400R Hartford CT PD Detect.
13. 33.82 New Haven CT FD
14. 46.38 Meriden CT FD
15. 154.220 Wallingford CT FD
16. 154.145R Torrington CT FD
17. 154.265 Hartford Area Intercity
18. 154.295 South Central Intercity
19. 154.160 Chicopee MA FD
20. 155.100 W Springfield MA FD
21. 453.800R Windsor CT FD
22. 453.575R Rocky Hill FD

453.050R Avon Ct. PD
453.275R New Britain CT PD
453.475R Windsor CT PD
453.525R Rocky Hill CT PD
453.825R Bloomfield CT PD
451.075R Holyoke MA PD
460.075R RAFS CT Intercity
460.175R RAFS II CT intercity
460.100R Springfield MA PD Disp.
460.450R Springfield MA PD Info
460.500R Springfield MA PD Det.
460.125R Manchester CT Pd
460.225R WEMLEC MA intercity
460.475R WEMLEC II MA Intercity
460.275R E. Windsor CT PD
460.325R Vernon CT PD
460.350R Wetherfield CT PD
460.425R Newington CT PD
460.425R longmeadow MA PD
460.550R Enfield CT PD
33.84 Enfield CT FD
42.04 CT SP Troop H

23.	453.925R	Rocky Hill RD	42.46	MA SP Troop B
24.	453.300R	Bradley Int'l. Apt. FD	45.86	CT SP Hotline
25.	460.600R	E Hartford FD	155.490	Chicopee MA PD
26.	460.250R	E Hartford PD	155.520	W Springfield MA PD
27.	460.625R	Wethersford CTFD	45.18	Meriden CT PD
28.	46.14	Middleton CT FD	452.650	Hunters Ambulance Ser.
29.	155.370R	Middleton CT PD	42.48	CT SP Troops F and I
30.	45.120	Berlein CT FD	42.52	CT SP Troops A,B, and L
31.	33.58	Plainville/Southington CT FD	42.18	CT SP Detectives
32.	46.20	Glastonbury CT FD	462.975	CT C-MED* BASE
33.	155.220	Professinal Amb.	154.295	New Haven Co. Fire
34.	155.340	CT Statewide EMS Network		

*Central Medical Emergency Direction

PUBLIC SAFETY—GREAT LAKES

Send Public Safety and Special Emergency frequencies, radio system details, and questions as follows—Illinois, Indiana, Wisconsin, Michigan, Kentucky, and Ohio:

David Wilcox, 1711 Excalibur Drive, Janesville, WI 53545

Welcome to the the October PS-GL column. Not much in the way of membership input for this month, all I have is some more listener profiles that were sent in to Bill Mauldin and forwarded to me.

Listening area: Cook Illinois and Lake County Indiana

155.610	Police Lansing Ill.
155.040	Police Lansing Ill.
153.890	Fire Lansing Ill.
154.860	Police Hammond Ind.
154.340	Fire Hammond Ind.
153.980	Fire & Local Munster Ind.
154.815	Police Lake County Ind.
42.420	Indiana State Police
42.260	Indiana State Police
42.120	Indiana State Police Car to Car
154.370	Fire Lynwood Ill.
155.130	Police Munster Ill.
155.700	Police Burham Ill.
42.340	Illinois State Police Dist. 4
42.660	Illinois State Police Dist. 4
42.500	Illinois State Police Car to Car
42.560	Illinois State Police Chicago Ill.
42.880	Illinois State Police Chicago Ill.
155.595	Police F-1 North Cook Co. Ill.
155.535	Police F-2 South Cook Co. Ill.
155.640	Police F-5 Cook county Ill.
154.995	Police F-3 (TAC) Cook Co. Ill.
159.225	Animal Control Calumet City Ill.
158.745	Local Lansing Ill.
155.310	Police Highland Ind.
154.680	Illinois State Police Dist. 4
154.905	Illinois State Police Dist. 4
154.755	Indiana State Toll Road Police
155.415	Indiana State Toll Road Maintenance
470.812	Police South Holland Ill.
470.937	Police Lynwood Ill.
155.055	Civil Defence Calumet Ill.
811.212	Police Calumet Ill. (Car to Car)
856.212	Police Calumet Ill. Dispatch

Listening area: Southwest Chicago Suburbs CASN-004

42.500	Illinois State Police - Severe Weather
42.340	Illinois State Police Dist. 4
42.660	Illinois State Police Dist. 4 Expressways
42.600/42.700	Illinois State Police Dist. 5

42.440/42.840	Illinois State Police Dist. 21
155.460	Illinois State Police Statewide
154.680	Illinois State Police Dist. 4
154.920	Illinois State Police Dist. 5
155.475	ISPERN
155.370	Point to Point
155.025	Illinois ESDA
154.785	Orland Park PD Ch #1
154.770	Orland Park PD Ch #2
155.880	Orland Park PD Ch #3
154.070	Orland Park Fire
153.890	Tinley Park Fire
155.820	Tinley Park PD
470.8625	Palos Park PD
39.620	Will County Sheriff Ch #1
39.660	Will County Sheriff Ch #2
155.670	Frankfort PD
155.430	Lockport PD
154.430	First Fire District
154.400	Mokena Fire
154.355	Joliet City Fire
154.280	S. W. Fire Mutual Aid
154.130	Chicago Fire Main
153.770	Chicago Fire Englewood
155.535	Cook County Sheriff South
154.905	Cook County Rangers
155.190	Oak Forest PD
42.420	Indiana State Police
154.905	Ill. Dept Of Law Enforcement
151.445	Sec. of State

Listening area: Dodge County Wisconsin — Carl WI-54

153.785	Dodge County F1 Car to Base
155.745	Dodge County F2 Car To Car
154.785	Dodge County F3 Sheriff repeater
155.475	WISPERN
155.895	Dodge County Local Government
154.445	Dodge County EMS/Fire Paging
155.370	Point to point
154.725	Beaver Dam PD repeater
151.115	Dodge County Highway repeater
453.550	Dodge County Government repeater
46.480	Dodge County Fire
45.880	Mutual Aid
46.300	Fireground
46.160	Woodland Fire Dept Training
46.420	Brownsville Fire Dept
154.295	Firecom
155.325	Hospital/Ambulance
155.400	EMT-I Hospital/Ambulance
151.925	Beaver Dam Humane Society
159.450	State Patrol Dist 3 Car to Base
154.935	State Patrol Dist 3 Base
151.460	State Patrol Statewide
159.255	DNR Yellow Repeater Net
46.540	Prison Net
158.820	Waupun Prison Farm
155.010	Waupun PD
155.115	Waupun DPW
453.450	Beaver Dam DPW
153.725	Wisconsin Natural Gas Co.
158.175	Columbus Rural Electric
451.575	Wisconsin Electric Power
48.240	Wisconsin Power & Light
122.700	Dodge County Airport

Listening area: West Central Wisconsin — John WI-084

154.680	State Patrol Dist 6 Base To car
159.420	State Patrol Dist 6 Car to Base
154.905	State Patrol Dist 5 and Dist 8 Base to Car

159.450	State Patrol Dist 5 and Dist 8 Car to Base
154.875	Eau Claire Sheriff F1 Dispatch
155.130	Eau Claire PD F2 Dispatch
155.130	Pierce Co. Sheriff F1
155.595	Dunn County Sheriff F1
155.580	St Croix County Sheriff F1
155.415	Chippewa County Sheriff F1
155.775	Barron County Sheriff F1
155.775	Trempealeau County Sheriff F1
154.920	Minn. State Patrol
155.250	Clark County Sheriff F2
156.210	Pepin County Sheriff F1
155.115	Buffalo County Sheriff F1
155.475	Wispern
155.370	Point to Point
155.340	EMS
154.310	Eau Claire City Fire
154.190	Dunn County Fire
46.420	Eau Claire County VFD
155.880	Eau Claire Emergency Govt.
155.835	Chippewa Emergency Govt.
154.430	Chippewa Rural Fire Protection
162.400	NOAA Weather West WI
453.325	WI. DOT Dist 6 F1
129.800	Northwest Airlines
123.600	Eau Claire FSS
125.300	MSP ARTCC (Eau Claire)
133.750	MSP ARTCC (Eau Claire)
160.890	C & NW Railroad F1 Road
161.175	C & NW Railroad F4 Yard
159.225	Wisc. DNR Green Repeater
159.255	Wisc. DNR Yellow Repeater
159.330	Wisc. DNR Blue Repeater

Thanks a lot to all the members that have sent in the profiles, that's all I've got for this Month. Till next month

Dave

Send Public Safety and Special Emergency frequencies, radio system details and questions for Alaska, Arizona, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming to:

George N. Hoggatt, 17473 E. 16th Dr, Aurora, CO 80011

Not a lot this month, but some news, not all good.

COLORADO

AURORA - Aurora seems to be continuing to go to 800 Mhz. The new transmitter buildings a fire station 9 appear complete and, as of mid-July, the new tower was around the new buildings, in pieces.

DENVER - From an official source, Denver has signed (early July) a

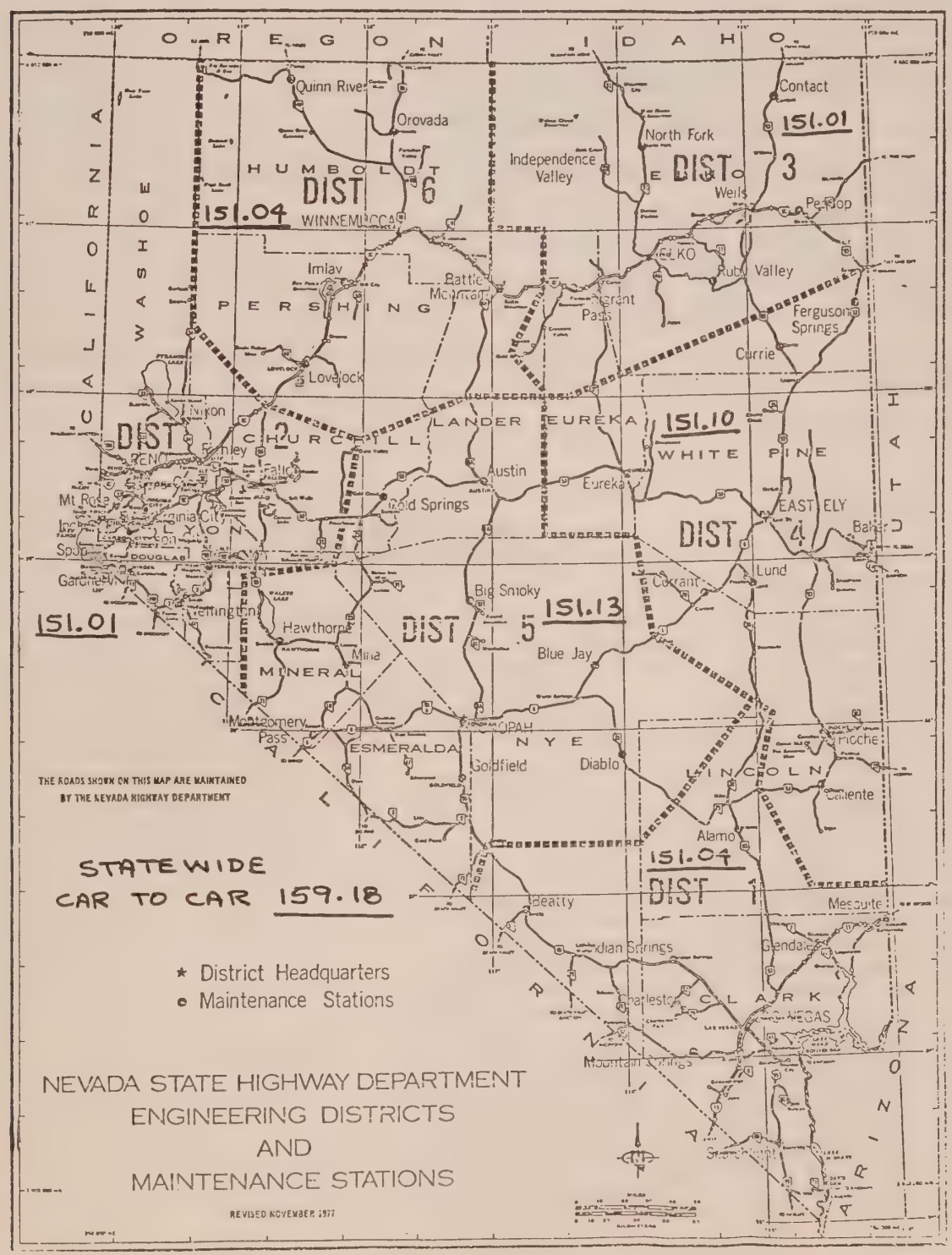
$4.7 million contract with GE for a 20 channel (expandable to 40 channels), trunked, grouped 800 Mhz system for the Police Department, Fire Department, Emergency Services, and Sheriff's Department. It is to be installed and operational by mid summer 1988.

ARAPAHOE County - from the May 1, 1987 microfiche, Arapahoe County is licensed for a five channel trunked 800 Mhz system - 856.3125, 857.3125, 858.3125, 859.3125 and 860.3125. Nothing has been heard in a week of monitoring.

State of COLORADO - again from the 5-1-87 microfiche, the State of Colorado has a five channel trunked system licensed - 856.0625, 857.0625, 858.0625, 859.0625, 860.0625. However, this is on a commercial repeater system and I heard no traffic that could be identified as State. It does not make enjoyable listening.

NEVADA

The following (or nearby) map comes from Greg (?) and Fred (NM-005).



UTAH

Corrections to the August 1987 Utah listings. Corrections from Mike (Id-001).

SALT LAKE CITY

The listings for the Salt Lake Sheriff were Salt Lake City PD. The correct is:

1 460.100 east
2 460.150 central
3 460.200 west
4 460.300 service
5 460.375 car to car
6 460.050 investigations

Add the following additions frequencies of interest:

453.875 Salt Lake Airport operations
155.025 Civil Defense
155.565 State Narcotics Bureau, SLC
155.550 State Prison, south of SLC
461.125 Lifeflight Helicopter SLC

PARK CITY, SUMMIT COUNTY - Michael (UT-021)

155.610 County Sheriff and Fire dispatch (includes Park City fire dispatch)
154.220 Park City fireground
154.740 Park City Police Dispatch
462.950 Park City Ski Patrol
463.175 Park City Ski Patrol
463.950 Park City Ski Patrol

Mike notes that Park City is in the mountains and it is hard to pick up much except the local services.

UTAH HIGHWAY PATROL

DEPARTMENT OF PUBLIC SAFETY

The State of Utah

OFFICIAL ASSOCIATED PUBLIC SAFETY
COMMUNICATIONS OFFICERS "TEN SIGNALS"

10-35 Reserved
10-36 Security Check
10-37 Reserved
10-38 Reserved
10-39 Urgent Use Light and Siren
10-40 Silent Run, No Lights
10-41 Beginning Tour of Duty
10-42 Ending Tour of Duty
10-43 Shuttle
10-44 Permission to Leave
10-45 Animal Carcass at ____
10-46 Assist Motorist
10-47 Investigate Suspicious Vehicle
10-48 Disturbing the Peace
10-49 Traffic Light out at ____
10-50 Accident (F, PI, PD)
10-51 Wrecker Needed
10-52 Ambulance Needed
10-53 Traffic Control
10-54 Change to Channel ____
10-55 Intoxicated Driver
10-56 Intoxicated Pedestrian
10-57 Hit and Run (F, PI, PD)
10-58 Airplane Crash
10-59 Reckless Driver
10-60 Out of Car on Violator at ____
10-61 Motor Inspection
10-62 Request Permission Car to Car
10-63 Prepare to Make Written Copy
10-64 Vandalism
10-65 Juvenile Problem
10-66 Major Crime Alert
10-67 Net Message
10-68 Runaway Juvenile
10-69 Missing Person
10-70 Fire Alarm
10-71 Nature of Fire
10-72 Progress Report on Fire
10-73 Rape
10-74 Civil Disturbance
10-75 Domestic Problem
10-76 Meet Complainant
10-77 Return to ____
10-78 Back Up ____
10-79 Notify Coroner
10-80 Chase in Progress
10-81 Breathalizer Report
10-82 Prisoner in Custody
10-83 Confidential Information
10-84 Visitors Present
10-85 Victims Condition
A. Fair C. Critical
B. Poor D. Possible Fatality
E. Obvious Fatality
10-86 Crime in Progress
10-87 Abandoned Car
10-88 Man with Gun
10-89 Bomb Threat
10-90 Bank Alarm At ____
10-91 Burglary
10-92 Theft
10-93 Unnecessary Use of Radio
10-94 Contact Your Home
10-95 Out at Home
10-96 Mental Subject
10-97 Test Signal
10-98 Prison Break
10-99 Wanted/Stolen Indicated

PUBLIC SAFETY — CALIFORNIA

Editor: Dan Figueroa, CA-LA-359,
P.O. Box 7181, Capistrano Beach, CA 92624

Welcome one and all to the October 1987 PS-CA column. The magic number is 2, and still counting. Stand-by all routine traffic on this frequency...

Shopping for a new car? How about one like the recently purchased CHP cruisers? We've received the bid specifications for the 1987 Chevy Caprice Class E sedan (purchase price $10,954 each). With a 15.4 MPG rating, this 8 cylinder, 350 cubic inch V-8 engine (with power windows) has an acceleration performance of: 0-60 MPH (10.90 seconds); 0-100 MPH (38 seconds); 50-100 (27.03 seconds); and has a top speed of 118 MPH. The drive train warranty is 36 months or 100,000 miles (which ever comes first). Although there is a 6 page bid specification list, some of the performance tests are as follows: "...Each vehicle delivered against this specification shall be capable of sustained high speed operation at full open throttle for a minimum distance of 25 miles without damage to the power train;" "Speed and Acceleration: Top speed 110 MPH minimum within 2 miles;" "Braking: 4 stops of impending skid type shall be made from a speed of 90 MPH. The stops are to be at 2 minute intervals. The ability to stop in a straight line will be evaluated. Approximately 5 minutes after the test has been completed, it will be repeated, followed by an all wheel lock stop at 60 MPH. The ability of the vehicle to stop in a straight line will again be evaluated. Vehicles equipped with a self-adjusting brake feature will be subjected to the following test immediately after the conclusion of the above test: 4 stops will be made while the car is being driven in reverse. If the self-adjusting feature is found to adjust the brakes to the extent that the wheels drag after the drums have cooled, the vehicle will not be accepted;" and "Wheels and Tires: Wheels shall be 14x6.0 inch minimum and shall have a safety ridge rolled into rim or otherwise prevent the tire from separating from the wheel in the event of a flat. The tires shall comply with State of California Specifications for high speed capability tires..." Now the bad news: These cars are unavailable to the public (they don't meet CA emissions standards). Oops!

Checking the OTH, API, UP, & CNN newswires: Looking like a "Pentagon war room," the Emergency Command Center of the CDF is preparing for the rash of firestorms expected during this fire season. From this Emergency Command Center, dispatchers are able to radio the huge arsenal of equipment statewide for fire assignments over the 40 million acres covered by CDF. The Emergency Command Center, located in Sacramento, operates 24 hours and decides where the concentration of manpower and equipment will go, based on radio reports from the individual Ranger Units. In the event there are several major fires at one time, the Emergency Command Center will ultimately make the final decision on allocation of equipment and manpower.

"Sparks From the Inland Empire:" Thanks to diligent work by Riverside FD and the city Finance Department, Riverside FD will be receiving additional equipment, such as 2 new "Jaws-of-Life," 2 rescue saws, 15 handheld radios, new Stokes litters, 3 high-volume smoke ejectors, and 5 Pierce pumpers (to be delivered by early 1988). In addition, a new radio repeater and third frequency will be acquired to handle the increase in radio traffic. Over at CDF, Moreno Valley Fire Station #48

is now under construction (scheduled to open in the fall of 1987), with Engine 48 delivered and temporarily assigned as a reserve engine at Station #6, until the construction is completed. [Courtesy of the Riverside Area Fire Buffs Associates (RAFB)]

And finally, UFO's over the San Gabriel Valley? No, it's just the Air Quality Management District (AQMD) with the state Air Resources Board (ARB) having a "smog testing" party. Both agencies invited 200 international scientists to launch balloons over the SG Valley. Each of the disposable balloons had a radio transmitter aboard, that will transmit data on the quality of the air at various altitudes. With $10 million in funding, what could go wrong? For the first time in the 11 year history of the AQMD, the main ingredient was absent: SMOG!!!! The AQMD reported that the smog level for this time of year has been unusually low. Officials are blaming "El Nino" for the problem (or blessing) and will decide whether to try later in the summer months or wait until next year. An AQMD spokesperson was quoted as saying: "For 12 million people it is great. For 200 people it is awful."

Let's switch to the Inquiry Channel: From NEAL [CALA-385]: He has submitted LASO freqs from the 1987 "Fox Scanner Guide" and would like to know what they are: 37.02, 37.04, 37.06, 37.08, 37.12, 37.16, 37.20 37.24, 37.28, 37.30, 37.32, 37.34, 37.36, 37.38 (call of KMF288); 49.86 (KNJM990 Gorman); 45.46, 45.92 (KCU833). Neal also submitted several other LA County freqs: 171.825 (KF2XCN) 173.396 (?) with various callsigns and locations; 851.6875 (WZA814), and 852.3125 (WZS448)?

[EDITORS' NOTE: We are told the 37 Mhz freqs were obtained when the 39 Mhz system was developed for Countywide agency coordination and repeater "links"; The 49.86 shows to be the "mobile" freq for the cordless phone "base" of 46.67; and the KCU833 call is still assigned to the LA Co Marshall's Office. Can anyone verify?]

Neal also has sent the Olive View County Hospital (Sylmar) security freq of 453.900 Mhz.

From BRAD [CALA-650]: To answer Bob's [CAAL-042] question in the Aug 87 Inquiry Channel (re: LAFD's "CVA"): The correct term should be "CAV" which means "conditionally available." A fire unit "CAV" is not available for emergency responses until certain conditions are met (i.e. pick up of personnel, arrival in unit's first-in district, unit repair, etc.). In addition, when units arrive at an emergency scene, the digicom "ONS" (on scene) is pushed.

Switching to the Data Channel: Last month's San Francisco PD's radio ID's (by ROBERT [CASC-043]) did not have any freq info, so we used a list that was several years old. We are now told that SFPD is slowly phasing out the 45 Mhz band and reorganizing the UHF assignments as listed below (the 45 Mhz bands are still being used until the phase out is complete):

460.225 R Ch 1 Golden Gate Div (Richmond, Ingleside, Taraval Dists)
460.125 R Ch 2 Golden Gate Div (Potrero. Mission Districts)
460.500 R Ch 3 Metropolitan Div (Central, Southern Districts)
460.075 R Ch 4 Metropolitan Div (Northern, Park Districts)
460.450 R Ch 5 Golden Gate Division Service
460.350 R Ch 6 Metropolitan Division Service
460.525 R Ch 7 Tactical Service
460.550 R Ch 8 Tow Desk
460.025 R Ch 9 Mutual Aid
460.025 S Ch 10 Car-To-Car
460.225 S Ch 11 Golden Gate Division Car-To-Car
460.500 S Ch 12 Metropolitan Division Car-To-Car

From GEORGE [CATO-001]: As a follow up to the CDF 80-channel plan of the Midland 70-482B radio in August, George has broken down the 4 CDF Region Nets by Ranger Unit, Command Center, and Local & Car-to-car Nets. Per George, the local net are on repeaters, and.the car-to-car nets are short-range simplex, for training and emergencies:

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ALL Federal Govt Systems

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PUBLIC SAFETY: CALIFORNIA continued

UNIT	RANGER UNIT NAME	COMMAND CENTER	LOCAL	CAR/CAR
	REGION 1 (RO-1)	SANTA ROSA	151.385	159.270
1100	Mendocino	Willits	151.190	159.225
1200	Humboldt / Del Norte	Fortuna	151.250	159.405
1300	Lake / Napa	St. Helena	151.340	159.315
1400	Sonoma	Santa Rosa	151.460	159.390
1500	San Mateo / Santa Cruz	Felton	151.370	159.285
1600	Santa Clara	Morgan Hill	151.400	159.375
	REGION 2 (RO-2)	REDDING	151.325	159.360
2100	Butte	Oroville	151.400	159.375
2200	Lassen / Modoc	Susanville	151.190	159.390
2300	Nevada / Yuba / Placer	Auburn	151.250	159.405
2400	Shasta / Trinity	Redding	151.160	159.270
2500	Tehama / Glenn	Red Bluff	151.370	159.285
2600	Siskiyou	Yreka	151.250	159.330
	REGION 3 (RO-3)	RIVERSIDE	151.265	159.330
3100	Riverside (West)	Perris	151.385	159.360
3200	Riverside (East)	Perris	151.175	159.450
3300	San Diego	El Cajon	151.190	159.225
3400	San Luis Obispo	San Luis Obispo	151.325	159.315
3500	San Bernardino	San Bernardino	151.445	159.390
3600				
	REGION 4 (RO-4)	FRESNO	151.265	159.330
4100	Tulare	Visalia	151.190	159.225
4200	Tulare / Mariposa	Mariposa	151.460	159.390
4300	Fresno / Kings	Sanger	151.385	159.270
4400	Tuolumne / Calaveras	San Andreas	151.175	159.450
4500	Amador / El Dorado	Danaher	151.190	159.225
4600	San Benito / Monterey	King City	151.250	159.405

George also has included a radio code list formerly used by CDF. The CDF uses plain language instead of the code:

909 Traffic Conditions Need CHP
910 Can Handle
932 Turn On (State/Local Net) Mobile Relay At...
933 Turn Off Mobile Relay
949 Burning Permit Inspection or Issue Burning Permit At...
950 Burning Permit Fire
951 Need CDF Investigator
952 Report on Conditions
953 Check Smoke
954 Off The Air At Scene of Fire
955 Fire Under Control
956 Assignment Unfinished, But Available For Dispatch
980 Restrict Calls to Emergency Traffic on...Radio Net(s)
981 Resume Normal Traffic

CODE 2 Routine Call, Proceed Immediately Without Siren & Red Light
CODE 3 Emergency Call, Proceed Immediately With Siren & Red Light
CODE 5 Standby For Possible Dispatch of Men & Equipment Out-of-Ranger Unit/District

10- 1 Receiving Poorly
10- 2 Receiving Well
10- 3 Stop Transmitting
10- 4 OK or Acknowledgment
10- 5 Relay
10- 7 Out of Service
10- 8 In Service
10- 9 Repeat
10-10 Out of Service at Home - Subject to Call
10-13 Officals/Visitors Present
10-19 Return to Your Station
10-20 What Is Your Location?
10-21 Call...By Telephone
10-21A Adv. My Home I Will Return
10-22 Disregard Last Message
10-23 Standby - Busy
10-25 Do You Have Contact With..
10-28 Vehicle Registration Check
10-36 Correct Time
10-37 Who Is The Operator?
10-39 Can (Name) Come To Radio?
10-40 Is...Available For (10-21)?
10-49 Proceed to...
10-86 Any Traffic For Caller?
10-97 Arrived At Scene
10-98 Finished With Last Assignment

From LEE [CASC-058]: He reports that as of 06-30-87, 10:00 PM (PDT), Sacramento PD now uses "plain language" for radio transmissions (an all channel on-the-air countdown was heard up to the last minute); and almost all 900 codes have been eliminated. Only Code 900 (Officer needs help), Code 1000 (Robbery involving coded "TAG" and RAM units) and Code(s) 936, 936F, & 936M (city & county computer subject checks) are still being used. Code 2 (Respond without Lights & Siren); Code 3 (Emergency Lights & Siren), Code 4 (Cancel), Code 7 (Mealtime), & Code 8 (Switch radio channels) will also continue to be used. Lee also reports that priority numbers are being assigned for the handling of radio calls, with #1 being the highest priority. More on this soon. It looks like many agencies are going to "plain language" dispatching.

Again from CAPT. BILL [FL-137]: Another Listener Profile from the Big Bear Lake (San Bernardino mountain) area:

	FREQUENCY	USAGE
1.	162.550	NOAA Weather
2.	162.400	NOAA Weather
3.	155.910	San Bernardino SO (Ch 1)
4.	155.920	San Bernardino SO (Ch 2) [possibly 154.920]
5.	154.740	San Bernardino SO (Ch 4)
6.	42.600	CHP San Bernardino
7.	154.190	Big Bear Fire (Green)
8.	154.325	San Bernardino Fire (Red)
9.	154.280	CA State (Fire White)
10.	162.200	USFS Local
11.	151.445	CDF (Repeater)
12.	151.430	CA Fish & Game
13.	159.120	San Bernardino Road Conditions
14.	155.775	Big Bear Lake Public Works
15.	47.160	CalTrans (DOT) Road Conditions
16.	155.835	MWD Lake Patrol
17.	155.340	HEAR Net (San Bernardino Co Hospitals)
18.	155.400	San Bernardino County Med Net (Bear Valley Hospital)
19.	154.625	MTN Telephone
20.	122.700	Big Bear Airport
21.	151.835	Falcon Cable Television
22.	151.985	CONTEL Telephone Repair

23.	48.500	So Cal Water (Utility Service)
24.	463.700	Snow Summit Ski Area (Ski Report)
25.	43.180	Homestead Building (Business)
26.	151.925	Suie's Towing (Business)
27.	49.830	Portable Telephones

And from Riverside County:

1.	460.175	Riverside PD (F-1) Operations
2.	460.600	Riverside FD (F-2) Operations
3.	155.295	Goodhew Ambulance Co (Operations)
4.	155.265	Paramedic/Hospital
5.	155.340	Hospital/Hospital
6.	155.505	UC Riverside
7.	45.280	Riverside Local Government
8.	153.845	Riverside Local Government
9.	48.020	Riverside Electric Company
10.	121.000	Riverside Tower
11.	121.700	Riverside Ground
12.	135.400	ONT A/D for Riverside Airport
13.	119.650	ONT A/D (High altitude over Riverside)
14.	124.900	LAX (ILS approach over Riverside)
15.	134.000	ONT A/D for March AFB
16.	158.850	Riverside SO (F-1) Also, for cities of Norco & Moreno Valley, and County Marshall units.
17.	42.540	CHP Riverside Dispatch
18.	42.240	CHP Riverside units (mobile)
19.	42.340	CHP Statewide Dispatch
20.	42.180	CHP Statewide Mobile
21.	151.385	CDF Riverside County
22.	151.265	CDF Region 3 (Southern California)
23.	151.355	CDF Statewide
24.	168.750	Cleveland National Forest
25.	415.525	USFS South Zone
26.	154.160	OES Fire Repeater
27.	154.220	OES Fire Repeater
28.	154.280	OES Statewide Fire Net
29.	155.160	Riverside Search & Rescue
30.	154.100	Riverside County Local Government
31.	462.675	REACT (Traffic conditions)
32.	162.550	NOAA Weather
33.	47.160	CalTrans (Riverside area)
34.	173.275	Riverside Press-Enterprise

Finally, an annoyed (and embarrassed) police dispatcher was overheard saying the following to another police dispatcher by a newspaper reporter: "I didn't get a color on that white Chevrolet. I'm telling you, I didn't get a color on that white Chevrolet. Before I dispatch, I've got to get the color on the white--OH." [Special thanks to the "(Utah) Deseret News Reporter"]

With special thanks to "El Nino," and until next month, "We now clear the frequency for routine traffic..."

RAILROADS

Gary L. Sturm and
Bill Farmer, Editors

Send information about railroad frequencies and their uses, railroad system details, and related questions to:

Bill Farmer, P.O. Box 1838, Thousand Oaks, CA 91360

Welcome aboard once again. We're happy to say we received some contributions this month, including an excellent listing for Detroit from Robert Anderson (MI-108). Robert sent a listing of the frequencies he has actually monitored, which is what we would like all of our readers to do.

In our June column we asked if anyone could give us the frequency for the new light rail system in Sacramento, California. Mark

Landgraf (NY-336) reports that the frequency is 453.525. In response to our mention last month that Canadian National police are using 800 MHz channels in Vancouver, BC, Mark advises that the frequencies are 811.4625 and 856.4625.

CTC Board magazine reports in its March issue that Southern Pacific has added a new PBX channel in San Francisco for use by company officials. The frequency given is 161.220.

Phelps Dodge runs trains from its concentrator at Morenci, AZ to a connection with SP at Clifton, AZ. The frequency used by these trains is 151.505. Ore trains in the open pit mine at Morenci use 153.380.

Metropolitan Stevedore Company operates a bulk coal facility in Long Beach, Calif., where coal is brought in by trains (mostly Union Pacific) and loaded onto ships for export. Metro uses two Alco RSD-5 locomotives (ex-SP) to push cars through the dumper. Their radio frequency is 151.715.

We wrote to David Donald (G.P.O. Box 1707, Sydney, NSW 2001, Australia) in response to his plea for correspondents in our August column. We got back a lengthy letter asking for more information on RCMA and including some frequencies for the State Rail Authority of New South Wales which we had requested. David is mainly interested in railroading but also listens to police and would like to hear from any scanner fans in the U.S.

Gary Saffer, our Public Safety North East editor, forwarded some member listings to Alan Henney (MD-069), our News Media Communications editor, who forwarded them on to us. The railroads listings included are 160.515 and 160.800 for Amtrak/Conrail in central Connecticut.

Vincent A. Purn (NJ-177) asks if the 1987 microfiche is available yet. We haven't received our usual announcement from NTIS, so don't know if it is or not. We suggested contacting Grove Enterprises, who sells microfiche sets at lower prices than NTIS does.

John Johnson (WI-84) wrote to ask what frequencies are being used for end-of-train telemetry on Soo Line and Chicago & North Western. As far as we know, all railroads except Norfolk Southern (consisting of Southern Railway and Norfolk & Western) are using 457.9375 for this purpose. John included a SASE so we sent him the information by mail.

DETROIT, MICHIGAN

by ROBERT ANDERSON (MI-108)

Here is a list of Detroit area railroad frequencies that I have been working on for the past few months. I monitored every channel listed for railroads with my tape recorder and from my home on the north side of Detroit. Some of the channels were very busy while on others I only heard a few words at a time and I had to record the channel for several days before I could find what the chanel was used for.

Chessie:

160.230	Plymouth-Rouge Yard-Union Belt
160.320	East Yard Dispatcher-Work Train
161.160	Livonia Yards

Grand Trunk:

160.590	Ch 1 Little use
160.530	Ch 2 Main Dispatch Channel
160.845	Ch 3 Train Crews-Yards-Pontiac Belt Line
160.350	Rip Wrecking Crew and Car Repair
160.470	Police
161.280	Police-License Checks-also used by other RR police
160.920	Communications Department-Mobile Phone Repeater-Pontiac, Michigan
160.950	Track Department
161.040	MoTerm-Ferndale Truck Yard
161.220	GT/DT&I Channel-Flat Rock-River Rouge

Conrail:

160.800	Dispatcher-Sterling Yard-Mound Rd-Milwaukee Jct

161.070	North Yard-Livernois Yard-Transportation Dept
160.560	Police
161.130/160.710 Ch 4	Telephone Repeater-Agents
160.980	Milwaukee Jct
160.860	Yardmaster River Rouge

Norfolk & Western:

160.440	Dispatcher-Boat Yard-Police

Great Lakes Steel:

153.080	Rail Operations

Canadian National:

161.025	Dispatcher-Windsor-St. Thomas
161.415	Yardmaster

Canadian Pacific:

161.475	Dispatcher
161.175	Maintenance-Windsor-Belle River-London
161.265	Yardmaster-Windsor South
161.355	Boat Yard Docks

Essex Terminal:

160.905	Yard Traffic (heard eng. 102-may be Essex Term.)

Other hard to hear channels:

160.380	
160.485	Rip Track-Road Repair
160.665	

One other channel that I heard was while going through Howell, Michigan. 160.575 was in use by the Tuscola & Saginaw Bay RR work crew and they were talking with Owosso, Michigan. The Tuscola & Saginaw Bay is operating the former Ann Arbor RR.

ALASKA RAILROAD

by MARK LANDGRAF (NY-336)

[All frequencies changed due to transfer of ownership from federal government to State of Alaska -ed.]

161.355	Ch 1 Road
161.385	Ch 2 Dispatcher
161.415	Ch 3 Yard
161.445	Ch 4 Gravel Trains loading & unloading
161.475	Maintenance of way
161.505	Maintenance of way
161.535	Maintenance of way
161.565	Maintenance of way

NEW YORK CITY TRANSIT AUTHORITY

POLICE DEPARTMENT

Last month we promised an article on this subject by Kirby McElhearn (NY-317). In the meantime we discovered that the same exact article was carried in the Public Safety North East column of the July Newsletter. So rather than waste space by duplicating it, we refer any interested readers to the July 1987 issue, page 53.

STATE RAIL AUTHORITY OF NEW SOUTH WALES (AUSTRALIA)

by DAVID DONALD

(Note: these are transmit frequencies only)

450.050	Main frequency, used for all normal train working
450.200	Parkes Yard, Penrith switching
463.550	Albury Yard
464.000	Enfield Yard
464.150	Sydney Yard

465.200 Lithgow Yard, Goulburn Yard
465.475 Port Kembla North Yard, Port Waratah (Newcastle area) Yard
465.575 Roselle Yard, Cringila (near Wollongong) Yard
468.6875 Tarre Yard, Grafton Yard (both unconfirmed)
469.625 Redfern Yard/Acdep (near Sydney station)
474.825 special work in the Wollongong area
484.850 Broadmeadow Yard (near Newcastle)
494.875 Junee Yard, Werris Creek Yard
487.600 Transport Investigation Bureau (loosely could be called "railway police") - Sydney metropolitan area

[We sent David copies of our past columns with Australia listings and he commented on some of the listings. -ed.]

Starting with the Queensland material, Channel 1 is the main channel used for all normal work, with Channel 2 being used to supplement Ch. 1 and often being used for yard switching. Channels 3 and 4 have very limited use, so far as I know, in that Ch. 3 is only used for switching at two locations on the Central Queensland coalfields, while Ch. 4 is only used at one location on the coalfields. However, when I was up there about eight months ago I heard these two channels being used by construction gangs and other bodies involved in electrification work in the coalfields area. QR are also starting to use frequencies 411.375, 411.425, and 411.625 for switching and associated work. 450.050, the main SRA frequency, is used by SRA trains in Queensland.

The Australia-wide allocation certainly was a great help, and does explain quite a number of rather strange frequencies that have appeared in recent times. Some systems are starting to use some of these frequencies, with V/Line (Victoria) having a complete TTB (Train to Base) system based on these frequencies—they are using the non-urban frequencies for urban use as well, as I believe it. Incidentally, the top frequency should be 417.550, not 418.550 as you have it.

Thanks to all who contributed this month—we hope David will become a member of RCMA and continue to send us information on Australian railways. Also we look forward to receiving information on U.S. railroads from all of our readers. So long until next month...

—Gary & Bill

SPECIAL EVENTS

This column is for Special Events.
Send your information well in advance to:

Nathaniel Lewis, P. O. Box 6952,
Philadelphia, PA 19138

Salutations:

Up-date on the Pope's visit to the United States.
During the month of September His Holiness will visit the following cities throughout his one week stay: Columbia S.C, Detroit, Miami, Los Angeles, Monterey, New Orleans, Phoenix, San Antonio, San Francisco. Things are still up in the air on his arrival time; however, check with the ARCHDIOCESE in each of these cities if you live nearby for the exact date and time of his visit.

All through the holiday celebration in Lufkin and Galveston Texas two lists of frequencies were very active and I trust if you visited the Ellen Trout Zoo or the Angeelino County Exposition Center in Lufkin you got an ear full.

****

Frequencies: I-input, R-repeater, S-simplex

158.775 S City of Lufkin - Ellen Trout Zoo and Zoo Railroad Maintenance
156.800 S Marine CH16 coordination of speed boat races
49.830 S Lufkin Jaycees-parking & concessions
450.750 R 455.750I KYKS-FM 105.1 -broadcast remote (dead carrier)
450.800 R 455.800I " " " " " (in use)
464.175 R 469.175I KTRE-TV CH9 news
154.710 R 155.636I Lufkin PD CH2 (dispatch)
154.950 S Lufkin PD CH3 (HHs working crowd control)
155.340 S Lufkin FD CH2 (amulance to hospital)
154.445 R 153.890I LufkinFD CH1 (dispatch)

++

Galveston Island Frequencies for Summer & 4th of July

Galveston PD CH1 460.200 R 465.200 I
Galveston PD Ch2 460.300 R 465.300 I
Galveston PD CH3 460.225
Galveston PD CH4 460.350 R 465.350 I
Galveston FD 151.115 R 154.190 I
Galveston Co. Health Dist (EMS dispatch) 155.055 R 154.115 I
Galveston Co. SO-mobiles and base at Crystal Beach 154.950 B/M

The following have a PL (CTCSS) of 146.2 Hz
Beach Patrol (licensed city & co.) Busy!!! 154.800 R 156.250 I
Galveston Co. SO CH1 155.565 R 154.710 I
Galveston Co. SO CH2 154.875 R 155.610 I

==========

Galveston Co. OCU 151.9.330 R 151.220 I
TPWD CH2 B/M 151.415 S
TPWD CH5 (all mobile to mobile traffic) 151.355 S
Marine CH13 Navigational (SDHPT ferries) 156.650 S
Marine CH16 Safety & calling 156.800 S
Marine CH21 USCG Galveston (operations) 157.050 S
Marine CH22 USCG Galveston (civilian to base) 157.100 S
We thank John A. Letney TX - 152 for this contribution.

^^

Rick Dubrava - NY 282 Passed on some information which proved to be very enlightening "at least to me anyway" on the renting of radios for special events or for any reason someone could think of without making a capital investment for equipment. So, if any of you out there is interested in purchasing a specific type of radio its a good idea to rent it first. After evaluating and experimenting with it you'll know if it has the features you want. I'm told there is a real need for more two-way radoi communications on a very short-term basis and most public events are coordinated using rented radios.
I'm sure the rental prices will vary depending on the equipment and the rental firms offering this service.

So, until next time this is your communicator saying "keep listening and pass it on."

VHF MARINE

Send information, articles, frequencies and their use, and questions that relate to private, commerical, and Coast Guard VHF maritime and inland waterways radio communications to:

Emmett L. Baxter, Jr., 4122 Granby St., Norfolk, VA 23504

Hello and welcome to your 1987 VHF Marine Column.

Our first report comes from Geoff (Eng.-005) and is a follow-up report from last month.Geoff sends the following concerning the English Coast Guard.

The Coast Guard service has a rather different job here than in the United States,I imagine,being primarily concerened with rescue missions rather than with drug,Mexican and Cuban smuggling.

The main Coast Guard frequency is 156.000; this is also used by

the RAF Air-Sea Rescue (ASR) helicopters,and lifeboats. The Lifeboat Service is 100% supported by voluntary contributions and all lifeboat men are volunteers (Usually local fisherman).

So the Coast Guards are stationed around our coasts,watching,and if they see anyone in trouble they call out the Lifeboats and/or RAF Helicopters. Or of course the Coast Guards might get a radio call from a vessel beyond the horizon or in fog.

There are two rescue co-ordination centres, at Edinburgh and at Plymouth, for major incidents. They each have four main frequencies:

5680 and 5695 Day
3023 and 3085 Night

So together they cover ships in distress, aircraft in the sea (rarely), mountain rescue and kids who get blown out to sea on airbeds and suchlike.

Our next article comes from Doug (NJ-152).Doug sends in an article from the Sunday Dec.2,1984 Asbury Park Press entitled "Operators of bridges middle men" written by Sherry Conohan.The following is an edited version of the article.

Mariners & Motorists don't always mix.

That statement is probably never more apparent than on a hot summer day when the pavement is steaming and cars are backed up for six blocks to a drawbridge that has opened for a boat.

It's a thankless job said Frank Brennan, supervisor of bridge operations for the state. Brennan oversee 39 drawbridges.

There are five state operated and five county operated drawbridges in Monmouth County.

There are three state operated and two county operated drawbridges in Ocean County.

DRAWBRIDGES:

Bridges	Over	Town
State Bridges - Monmouth County:		
Rt.36 Highlands	Shrewsbury River	Highlands-Sea Bright
Rt.35 Shark River	Shark River	Neptune City-Belmar
Rt.71 Shark River	Shark River	Avon-Belmar
Rt.35 Lower Manasquan	Manasquan River	Brielle-Pt.Pleasant Beach
Rt.70 Upper Manasquan	Manasquan River	Brielle-Brick Township
County Bridges - Monmouth County:		
Main Street	Compton Creek	Belford (Section of Middletown Township)
Oceanic	Navesink River	Middletown-Rumson
Sea Bright	Shrewsbury River	Sea Bright-Rumson
Ocean Ave.	Shark River	Avon-Belmar
Glimmer Glass	Glimmer Glass	Manasquan-Brielle
State Bridges - Ocean County:		
Rt. 88 Inland Waterway	Pt.Pleasant Canal	Point Pleasant
Rt. 13 Lovelandtown	Pt.Pleasant Canal	Point Pleasant
Rt. 37	Barnegat Bay	Dover Township
County Bridges - Ocean County:		
Beaver Dam	Beaver Dam Creek	Pt.Pleasant-Brick Twnshp.
Mantoloking	Barnegat Bay	Mantoloking-Brick Twnshp.

Most of the above bridges are manned 24 hours a day. The bridge operators say that the biggest problem is to try to coordinate the openings and to not inconvenience the motorists and the boats as little as possible. The Coast Guard has new rules that state that boat owners should lower all lowerable structures like radio antennas and outriggers. Doing this would help reduce bridge openings.

The busiest bridge in the area is the state run bridge on Route 35 over the Shark River.

The most dangerous bridge is the route 88 bridge over the Point

Pleasant Canal. This is because of the "hydraulic step" or rapid there. "What this means is that the water actually has a step at certain tides. It's like going up a waterfall."

At the present time a new and taller bridge is under construction beside the old one and will help relieve the boat and traffic congestion.

The article goes on to tell a little about each bridge and its problems. But all bridge operators agree that the boat traffic is on the uprise.

Thanks to Doug for the above article on bridges. As we all know the waters surrounding bridges can be dangerous. Thus communications with most bridges can be made on either 156.650 or 156.800.If you can't hear all the action try real hard. Most bridges have power restrictions of one watt output for short distance comunications only. Every now and then the power is allowed to reach 10 watts on the bridges with FCC approval for special circumstances.

The following is a list of some of the New Jersey Bridges that use 156.650 Mhz.

Burlington-Bristol Bridge - Burlington - WHH-394 - 1 watt/*
Ocean Dr. Middle Thorofare Bridge - Cold Springs - WQZ-342 - 1 watt/*
Sea Bright Shrewbury River Bridge - Freehold - WHF-951 - 1 watt/*
Rts.1 & 9 Hackensack River Bridge - Jersey City - WHG-954 - 1 watt/*
Newark RR Bridge - Newark - KMC-297 1 watt/*
Rts 1 & 9 on Passaic River Bridge - Newark - WHH-329 - 1 watt/*
Drawbridge over Passiac River - Newark - WRV-593 - 1 watt/*
Ocean City Longport Bridge - Ocean City - WQZ-343 - 1 watt/*
Tacony-Palmyra Bridge - Palmyra - WHH-350 - 1 watt/*
Victory Bridge - Perth Amboy - WXZ-357 - 1 watt/*
Navesink River Rumson Bridge - Rumson Bridge - WHD-771 - 1 watt/*
Grassy Sound Drawbridge - Wildwood - WXZ-584 - 10 watts

* Under no exceptions can the power out exceed ten watts.

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PAID ADVERTISING

Our next report comes from Larry (Mi.-001).Larry sends in an article from the Detroit Free Press Sunday Edition of 11/18/84 entitled "Ecologists plan to patrol lakes" by Patricia Montemurri.

Greenpeace International, the worldwide environmental organization whose members have staged highseas confrontations with whale hunters and radioactive waste polluters,wants to patrol the Great Lakes.

The organization's international board in August approved a plan to buy a vessel that would sail the Great Lakes - which account for one-fourth of the Earth's freshwater reserves - and the St.Lawrence Seaway.

"The purpose would be to stop polluters from polluting the Great Lakes and the St.Lawrence Seaway,and to draw attention to it by our non-violent,direct action," said Steve McAllister, the Wasgington-based campaign director for Greenpeace International.

The group hopes to buy a vessel,have it staffed by five or six members and see it sailing the Great Lakes by next spring,said John Hinck,the Seattle-based Greenpeace toxic projects director.

"TOXIC WASTES is going to be the leading issue in any boat tour of the Great Lakes," said Hinck. "The plan is to couple the physical presence of the Greenpeace vessel with political work in conjunction with the International Joint Commission on the Great Lakes."

Greenpeace has opposed the hunting of sperm whales and seals, and its members have confronted whaling fleets from small rubber boats. In 1982, a Dutch ship carrying radioactive wastes stopped dumping it into the Atlantic after two refuse containers struck a dinghy carrying Greenpeace members.

A Greenpeace sailboat patrols the American Atlantic Coast, drawing attention to pollution in the Chesapeake Bay, where the fishing and clam industries has suffered. Another Greenpeace vessel, with an on-board laboratory, patrols West German rivers.

In patrolling the Great Lakes, Greenpeace wants to focus on how industrial man-made pollutants - airborne from incicerators as well as those dumped directly into the water - are harming water quality and wildlife.

Organizers have been calling enviromentalists in Michigan for suggestions about areas and firms to target.

"It's almost a shell game with toxic wastes," said Hinck, adding that though laws exist to prevent water pollution by industries, much of the enforcement has been lax. The boat, he said, also would be used "as a kind of connector" between American and Canadian interests in the Great Lakes.

The following is a list of frequencies that the FCC has asigned to the Greenpeace Foundation.

Throughout U.S.:

KD-2860 - 122.900,123.100

San Francisco,Ca.:

KMC-237 - 4126.4 kc., 4145.0 kc., 4420.8 kc., 6220.0 kc., 6223.0 kc., 6523.3 kc., 8292.5 kc., 8295.6 kc., 12430.6 kc.,12433.7 kc.,12436.8 kc.,16588.5 kc., 16591.6 kc.,16594.7 kc.,22125.4 kc.,22128.5 kc., 22131.6 kc.,22134.7 kc.,22137.8 kc. 156.350,156.425,156.800,

VHF PROFILE: (West side Lake Michigan (PART 2) - Wisconsin)
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Algoma:

Algoma Marine Inc. - KUZ-445 - 156.425,156.450,156.800

Allouez:

Burlington Northern - KSF-720 - 156.500,156.600,156.800

Belgium:

State of Wisconsin - WHF-807 - 156.425,156.800

Brookfield:

Tate Electronics - KIZ-603 - 156.425,156.450,156.800

Green Bay:

Green Bay & Western - KPB-628 - 156.700,156.800
Green Bay Yachting Club - KPB-681 - 156.450,156.800
University of Wisconsin - KZN-514 - 156.425,156.800

Kenosha:

Gatti Boat Sales & Service - KVY-559 - 156.450,156.800
Kenosha Yacht Club - KVL-875 - 156.450,156.800
Villa Marine - WHU-414 - 156.450,156.800

Manitowoc:

Manitowoc Yacht Club - WHF-767 - 156.350,156.425,156.800

Milwaukee:

Associated Fishing - KIY-712 - 156.800,156.900
Walfrid A.Friedman - KXS-391 - 156.450,156.800
Jerry C. Inc. - WXZ-539 - 156.425,156.800
City of Milwaukee - KFT-312 - 156.500,156.600,156.800
KZN-488 - 156.600,156.650,156.800
Milwaukee Yacht Club - KWS-585 - 156.450,156.800
South Shore Yacht Club - KYI-921 - 156.450,156.800
University of Wisconsin - KBK-365 - 156.450,156.800,161.600

Port Washington:

City of Port Washington - WQX-661 - 156.450,156.800
Lorain Electronics - KVY-605 - 156.800,156.850,161.875,161.975
Middle Coast Marine - WQX-618 - 156.425,156.800,156.900
Movin on Charters - WQB-381 - 156.800,156.900
Ozaukee County - WQB-402 - 156.425,156.450,156.600,156.800
Smith Bros of Port Washington - KQU-375 - 156.450,156.500,156.800
Syntec Inc. - WRV-396 - 4420.8 kc.,6220.0 kc.,8292.5 kc.,12,430.6 kc.
156.425,156.450,156.800

Racine:

Custom Sails - KAE-888 - 156.425,156.600,156.800
Fifth St.Yacht Club - WHD-510 - 156.450,156.600,156.800
Harbor Lite Yacht Club - KVY-744 - 156.425,156.800
James J.Mauer - KXE-306 - 156.500,156.800
Palmer Johnson Inc. - WQB-494 - 156.450,156.600,156.800
Racine County Water - KZV-717 - 156.425,156.800,156.850
Racine Yacht Club - WXZ-504 - 156.425,156.600,156.800

Sheboygan:

First Sheboygan Corp. - WDT-593 - 156.425,156.800
Daniel V. Johnson - WHD-837 - 156.800,156.900
Sheboygan Yacht Club - KVL-868 - 156.425,156.800
Wharf-Sheboygan Inc. - WHF-765 - 156.800,156.900

Sister Bay:

Village of Sister Bay - WHU-284 - 156.425,156.800

South Milwaukee:

South Milwaukee Yacht Club - KYJ-596 - 156.450,156.800

Sturgeon Bay:

Bay Electronics - KXS-263 - 4420.8 kc.
156.450,156.800
Bay Shipbuilding Corp. - KVR-486 - 156.450,156.800

Door County - WXY-906 - 156.600,156.650,156.800
Selvick Marine Towing - WXZ-253 - 156.500,156.725,156.800
Sturgeon Bay Yacht Haven - WQZ-381 - 156.450,156.800

Two Rivers:

Great Lakes Electronics - WHZ-312 - 156.800,156.950
Daniel P. LeClair - KXE-301 - 156.800,156.950
Manitowoc Two Rivers - KVY-613 - 156.425,156.800,156.975
Sure Knot Charter - KMC-979 - 156.425,156.800,156.975
Stop N Dock Marina - WHU-311 - 156.425,156.800

Washington:

Willard G.Krueger,Jr. - KYH-812 - 156.450,156.800
Njord Heim Marina Inc. - KTD-584 - 156.425,156.800
Shipyard Island Marina - WHG-947 - 156.450,156.800

West Allis:

Great Lakes Towing Co. - WHU-343 - 156.500,156.600,156.800,156.900

Well thats it for this month. I do need further material for the upcoming months. Next month Jim (Ca-SF-030) will give an update on the San Francisco area along with other items.
See you next month. --------WRITE--------

RCMA NEW MEMBERS LIST

AZ 081 - GLENN J ARNOLD;FLR GRDN BX 204, 3709 FLORENCE;FLORENCE;AZ;85232
AZ 082 - W E YOUNG JR;4727 E WARNER #1016;PHOENIX;AZ;85044;
CALA703 - JAMIE BLITSTEIN;27512 ONYX LANE;CASTAIC;CA;91310;
CAOR331 - JAMES P --LAST NAME AND ADDRESS WITHELD BY REQUEST
CASC062 - JOHN PETTY;258 KRISMER ST;MILPITAS;CA;95035;
CASR030 - TERRY L STAFFORD;560 DE ARMOND PLACE;SANTA MARIA;CA;93454;
CO 059 - GEORGE HINDS;P O BOX 5708;WOODLAND PARK;CO;80866;
FL 243 - WALLACE ALEXANDER;1000 WIGGINS PASS ROAD;NAPLES;FL;33963;
FL 244 - GREG --LAST NAME AND ADDRESS WITHELD BY REQUEST
GA 081 - PATRICK J ELLIOTT;1631 SUGARMAPLE LANE;CONYERS;GA;30207;
GA 082 - ALVIN TEETER;2370 APT #A ASHLEY OAKS;ATLANTA;GA;30345;
LA 049 - DEWAYNE SHARBONO;2025 EDGEWOOD DR;BASTROP;LA;71220;
MA 178 - MR & MRS GREG RICHARDSON;48 INGALLS ST;LYNN;MA;01902;
MD 132 - ABIE CARTER SR;1518 N PULASKI ST;BALTIMORE;MD;21217;
MI 186 - JOHN HARTMAN;P O BOX 7026;BLOOMFIELD HILLS;MI;48013;
MN 056 - LARRY E --LAST NAME AND ADDRESS WITHELD BY REQUEST
NE 017 - J P --LAST NAME AND ADDRESS WITHELD BY REQUEST
NH 030 - RICHARD QUELLETTE;327 EAST ROAD;HAMPSTEAD;NH;03841;
NJ 239 - JOSEPH J ENUCO;1005 HUGHES DR A12;HAMILTON SQUARE;NJ;08690;
NJ 240 - JOHN J WALSH JR;7 YORK STREET;MCKEE CITY;NJ;08232;
NV 021 - RON KEPNER;7130 FOREST VISTA;LAS VEGAS;NV;89117;
NY 397 - MICHAEL HELLER;62 ACCABONAC ROAD;EAST HAMPTON L. I.;NY;11937;
OK 043 - GARY HIGHTOWER;P O BOX 2196;MCALESTER;OK;74501;
OR 076 - MARTELL --LAST NAME AND ADDRESS WITHELD BY REQUEST
OR 077 - HERBERT P --LAST NAME AND ADDRESS WITHELD BY REQUEST
OR 078 - ROBERT RAUDENBUSH;47616 S E WAGONEER LP;SANDY;OR;97055;
PA 246 - LEN --LAST NAME AND ADDRESS WITHELD BY REQUEST
PA 247 - DOUGLAS HUTH;111 MARGUERITE ST;EAST STROUDSBURG;PA;18301;
PA 248 - ALLAN R FEUER;9946 PRESIDENT;PHILADELPHIA;PA;19115-1704;
PA 249 - VAUGHN RICHTER;3936 NORFOLK DR;BETHLEHEM;PA;18017;
PA 250 - THOMAS MCCREA;P O BOX #7;POCONO LAKE;PA;18347;
TN 042 - TERRY JAYNES;RT 1 BOX 46D;LIMESTONE;TN;37681;
TX 204 - DAVID KOONTZ;2521 SUMMERTREE LN #2058;ARLINGTON;TX;76006;
TX 205 - DAL A WATSON;1436 INWOOD DR;ODESSA;TX;79761;
VT 004 - DAN GILMAN;123 WALNUT ST;RUTLAND;VT;05701;
WV 023 - TODD R MCKOWN;P O BOX 300;SNOWSHOE;WV;26209;

RCMA BUSINESS REPORT

RCMA, Inc. Financial Report
2nd Quarter

	April	May	June	Summary
Mail Prep/ Computer Updating	337.92	408.42	317.86	1,064.20
Newsletter Printing & Production	1,830.11	1,819.77	1,863.44	5,513.32
Postage:				
Bulk	225.00	235.00	225.00	685.00
1st Class	277.38	253.97	224.53	755.88
Back Issue Storage	46.00	46.00	46.00	138.00
Office Supplies	58.95	50.00		108.95
ANARC Dues		86.01*		86.01
Subscription Fees		15.00**		15.00
CA State Franchise Tax			94.78	94.78
Returned Ck/ Charges		19.50	19.50	39.00
	$ 2,775.36	$2,933.67	$ 2,791.11	$ 8,500.14
Balance on hand: 3/31/87: $10,044.92				
Deposits:	$ 3,078.05	$2,869.00	$ 2,165.85	$ 8,112.90
Balance:	$10,347.61	$10,383.95	$ 9,743.69	$ 9,743.69

FREE MEMBERSHIP TO STAFF EDITORS

The RCMA Board of Directors recently approved FREE membership for those working on the RCMA staff. If you would like to help your club by working on the staff of the RCMA NEWSLETTER, why not seriously consider joining the staff as a volunteer staff column editor? It only takes a few hours a month, and the rewards are many!

If YOU would like to be considered for ANY RCMA Staff position, write RCMA and tell us about your interests and qualifications. You must write your application on the typewriter or word processing printer that you would use, if selected, to write your monthly column. Keep in mind that all Editor columns are submitted monthly by the Editor in "camera ready" condition, reduced and then printed. If an Editor position becomes available, and two members of equal qualification have made application, the one with the best word processing machine will be selected.

There are no announcements made when an Editor resigns. The qualified replacement is selected from the Editor Wait List file. By all means, if you are interested in any RCMA position or opening, get your application in today! Send your application to the RCMA General Editor for consideration! The address is inside the front cover of the NEWSLETTER. We would like to have you join the RCMA Staff!! Current openings are noted in this publication. Others will take place in the future. Get on the Editor Wait List file, get free membership while working, and help RCMA grow!

TO : All RCMA Members
FROM : John R. Clark CAOR078 KA6JCX
SUBJECT : Thinking about the future

With all the new anti-scanner laws being generated, I believe any scanner owner may need the protection granted to amateur radio operators. There is no question that The American Radio Relay League (ARRL) has more lobbyists than any scanner group; this is why most local and state scanner laws have exception clauses for the federal licensed amateur radio operators. Money invested in getting a ham ticket could be considered as a form of insurance.

Today a scanner owner has an opportunity to acquire the FCC Novice in a painless fashion by taking advantage of changes in the procedures for testing. The exams are no longer given by the FCC (a rather stressfull experience), they are now given by local amateur groups. Classes are offered by community colleges and other organizations at very low cost.

The Gordon West Radio School (see August 1987 newsletter page 50) is quick way to prepare for the Novice Examination. It costs $21.95 and is designed to get you ready for the test in 21 days. The course covers both the code and theory portions of the exam. In addition to the instruction you will obtain you will also receive a $20.00 Icom and a $25.00 Kenwood gift certificates plus a free copy of CQ Magazine and lots of other material. For RCMA members Gordon indicates he will autograph your text.

While this deal sounds too good to be true, it is valid. Gordon has developed a method of teaching that is almost fool proof. It works, I have taken four of his classes and have FCC Advanced Operator Privileges. Many of the LA Area RCMA members have done the same. The majority of us did so when we had to go to the FCC center to take the exams. Today the new rules makes the acquisition of the tickets easier.

Remember you do not have to be an active Ham to keep your FCC license, the fact that you have it may help you. Amateur radio is a great hobby; but I have never talked on HF and I used my gift certificate to obtain a scanner antenna. I do value the FCC license. I would recommend any scanner owner to read the scanner laws, note the amateur exceptions, and THINK!

We extend our sincere condolences to the family of Bill Ell, CA-LA-185. Bill, who was a longtime RCMA member and former Secretary, passed away on Tuesday, August 27, 1987.

MEMBERSHIP CARDS AND BADGES

RCMA has no badges, decals, or membership cards for sale or distribution. The label on your newsletter is your membership card. While other clubs may have gimmicks or commercial good deals, our 'good deal' is your newsletter. You determine its content because you write it.

MAILING PROCEDURES

The newsletter mailed each month has a cover date for the following month. This practice is followed so that the US Post Office can deliver your issue no later than the first of the month designated on the cover.

New members whose applications are received before the end of the month will begin receiving the newsletter the following month. The first issue will be dated the month after that — as described above.

RENEWAL PROCEDURES

During the month your membership — and therefore your newsletter delivery — is due to expire, you will receive a renewal notice in the form of a postcard. It contains all the information you need to continue receiving the newsletter.

Renewal checks and new membership applications received by RCMA's General Manager, P.O. Box 542, Silverado, CA 92676, are processed for deposit on a weekly basis. Actual computer updating is done at the end of each month. If your check/MO is received after this cut-off date, you will miss the next issue of the newsletter and your new renewal date will be moved back accordingly.

PRORATED MEMBERSHIPS

Due to postage costs and other considerations, membership applications or renewals for any sum less than the current rate are prorated accordingly. This means that the renewal date will be due in less than a year. Please do not send more money to finish the year; just renew when your prorated date comes up.

Also because of postage costs, RCMA cannot comply with member requests to supply back issues free of additional charge (see the monthly Calendar section regarding ordering of back issues). If a late renewal results in a missed issue, the newsletter can be ordered from RCMA's secretary.

ADDRESS CHANGES

MEMBER notifications of address changes are also updated at the end of each month. If this type of address change notice arrives after the cut-off date, the mailing label will not reflect the new address until the following month.

The newsletter is mailed 3rd class under a bulk mail permit. When a member's address change is supplied by the POST OFFICE (instead of by the member), the charge to the club is 30¢.

SPECIAL FREQUENCY REQUESTS

Get in touch with your local RCMA group (see monthly Calendar section for chapter listings) or use the Contact/Information Wanted column for frequencies in your area. RCMA is not yet set up for national distribution of frequencies, although ultimately, the 'big picture' could include copies of the FCC and IRAC data bases, a fast computer, and software to select and sort in any order.

Contributions of frequencies and other material must be sent to the appropriate newsletter editor. (Editors use their own discretion in printing material sent them by non-members.) Data sent to P.O. Box 4563 is always subject to delay and sometimes cannot be forwarded because of postage costs.

DISCLAIMER

RCMA is a non-profit club for scanner enthusiasts. Neither RCMA or its newsletter are affiliated with, participate in the management of, or are responsible for, any other organization or publication. This disclaimer includes application to POLICE CALL, an annual publication put out by RCMA's good friend Gene Hughes. Queries about this publication cannot be answered by RCMA.

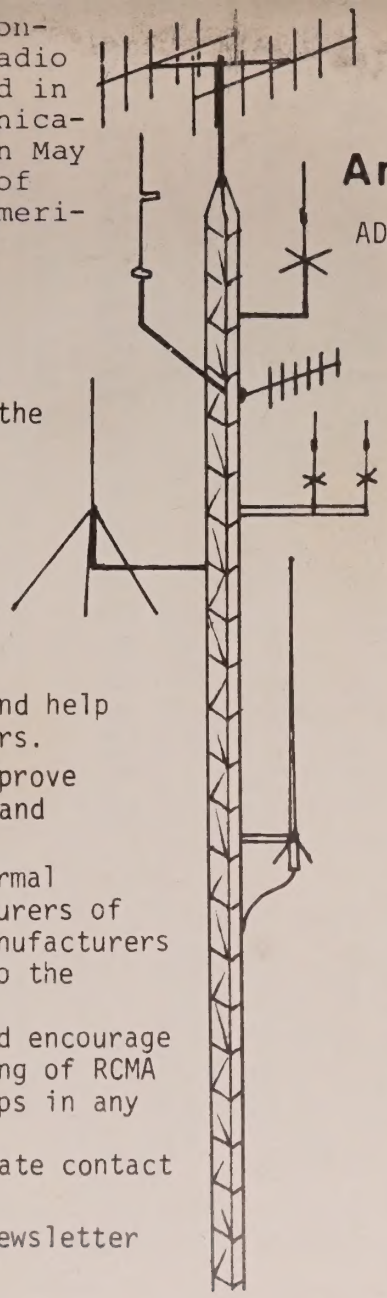
PLEASE REMEMBER — When writing to RCMA for any reason, include your membership number. Use it on your correspondence, checks, or money orders. RCMA tries hard to be responsive to your questions/problems. Using your membership number when you write helps us be of help to you.

The RCMA Board of Directors supports the policy of not printing certain federal law enforcement frequencies, e.g., Secret Service, FBI, Customs, DEA. Agreement with this policy has been reinforced by a membership survey.

The Radio Communications Monitoring Association is a radio club for persons interested in listening to two-way communications. RCMA was founded in May 1975 and is a Full Member of the Association of North American Radio Clubs (ANARC).

The goals of RCMA are:

1) To provide a fraternity for those who seriously pursue the hobby of monitor radio listening.
2) To try to be knowledgeable about two-way radio systems and operations.
3) To promote an understanding of the legal and ethical uses of monitor receivers.
4) To share information with and help other monitor radio listeners.
5) To try to understand and improve receivers, antenna systems and related equipment.
6) To offer suggestions and formal recommendations to manufacturers of monitor receivers and to manufacturers of other products related to the hobby.
7) To offer suggestions for and encourage the organizing and conducting of RCMA meetings and tours for groups in any geographic area.
8) To encourage and to facilitate contact between members.
9) To publish a regular club newsletter devoted to the hobby.



RCMA
P.O. Box 4563
Anaheim, CA 92803

ADDRESS CORRECTION REQUESTED

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